<110> Ni et al.

<120> 31 Human Secreted Proteins

<130> PZ034P1

<140> Unassigned
<141> 2000-05-05

<150> PCT/US99/26409
<151> 1999-11-09

<150> 60/108,207
<151> 1998-11-12

<160> 115

<170> PatentIn Ver. 2.0

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acaagagcag gtggcagcag gggaacgtct tctcatgctc cgtgatgcat gaggctctgc     660
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<212> PRT
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<211> 86
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<210> 5
<211> 271
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gcccctaact ccgcccagtt ccgcccattc tccgccccat ggctgactaa ttttttttat     180
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<212> DNA
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cagttccgcc cattctccgc cccatggctg actaattttt tttatttatg cagaggccga       180
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tacgactcac tatagggaaa gctggtacgc ctgcaggtac cggtccggaa ttcccggtc        180
gacccacgcg tccgcaggaa agcagttaac cagcgcagtc ctccgtgcgt cccgcccgcc       240
gctgccctca ctcccggcca ggatggcatc ctgtctggcc ctgcgcatgg cgctgctgct       300
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aagatattaa ttacggtttc catacattca gaatcaaggg actcacggat atggtactgt    480
gttcactgct acacagagtt tttctagaaa aaaaaattct ttattttttat cttctatttg    540
tatccaaacg atggtaaaac aaaattcctc tttagctagg tactgggatt ttttctttag    600
gaaatactaa tagagttaca aaggttagct tataggtaga caaaagactg gcggccaaac    660
agagcagtgg gtgaaatggg tccctgggtg acatgtcaga tctttgtacg taattaaaaa    720
tattgtggca ggattaatag canaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa    780
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<222> (921)
<223> n equals a,t,g, or c

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gatgatttcc cagtggaagt atgtcaacag tcttaagatc attgccagat ttcataaaat       180
atttaagtat ttgaaaaaga aacaaaatgt cttcatactt tagggaaacg aatacmctgt       240
ataccttctg tacaaatgtt tgtgttttca ttgttacact ttggggtttt acttttgcaa       300
tgtgacccat gttgggcatt tttatataat caacaactaa atcttttgcc aaatgcatgc       360
ttgcctttta ttttctaata tatgataata acgagcaaaa ctggttagat tttgcatgaa       420
atggttctga aaggtaagag gaaaacagac tttggaggtt gtttagtttt gaatttctga       480
cagagataaa gtagtttaaa atctctcgta cactgataac tcaagctttt cattttctca       540
tacagttgta cagatttaac tgggaccatc agttttaaac tgttgtcaag ctaactaata       600
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tccttttat gaatgaaaaa attagtataa agtaataaat gtcttatgtt acccaagaaa       840
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aaaaaaaaaa aaaaaaaaaa naaann                                           926
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<213> Homo sapiens

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aagctgctaa gcactgctcc ctccgtctct gtgaagagac cagcttctaa cagacggtgc       240
cgggctgacc ccccatcatg ccaggctggc tcaccctccc cacactctgc cgcttccttc       300
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cggatcccgg agtgcgcagt ttcggcttcc ccaggcccca acaggcagcc tatgggrcct      1260
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ttcctgctcc tgggagggtg gagggccctt gtcctagggc tgagtgctga gttccaaggg       180
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<211> 4129
<212> DNA
<213> Homo sapiens

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tacatcaaat accactactc ctcagcaacc atcccaggaa acctcacttt caatatcacg    180
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aaatagttga caaagtatgt atttgctggt gtcgtgtaaa tattggtatt ttaaaataaa      3720
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tataaatgga aatttttttt ttagctcttg ctttaagtgt ttgttgtta tctcagtcca       4020
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<210> 17
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<212> DNA
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<220>
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<400> 17

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<211> 1386
<212> DNA
<213> Homo sapiens

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<212> DNA
<213> Homo sapiens

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<210> 20
<211> 3881
<212> DNA
<213> Homo sapiens

<400> 20
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<210> 21
<211> 1180
<212> DNA
<213> Homo sapiens

<400> 21
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<210> 22
<211> 1910
<212> DNA
<213> Homo sapiens

<400> 22
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<213> Homo sapiens


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<212> DNA
<213> Homo sapiens

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<212> DNA
<213> Homo sapiens

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<223> n equals a,t,g, or c

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ttttccttaa ggtgcacagt aaatgtacag atagttatag gccactgttt tgtaatgtag    4140
tacatttcta atctattatt cctaacctat tataactgtt tgcagaaaga aaagaatttt    4200
tctaataatc tgtaaaatta tgctaacttc tacaagtagg cttctaaata aaatttttaa    4260
aaagagcaaa aaaaaaaaaa aaagg                                         4285
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<210> 28
<211> 775
<212> DNA
<213> Homo sapiens

<400> 28
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ggcacgagca cttccctgcc ttagtaaaca gagtatactg gagagtattt aacctttct     60
tgatgagtca tggtcatgat tataaacatc agccccttttt ataccttggt acggtgcagt    120
gatatcatta agagctatca atatgtgtag ggcttggctt ggcctttttat aggatgttat    180
gctgttctca ctgatggttt tttactgctc tctgctctgt cagtggagct atccgggca     240
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```
attgtagcgt ttgggtcctt ttacccctat gtcccccggc tatactttta aaacagcttt      300
agctgttctt tatcttgtgc acatgataca aaatatgttc ccgtacaata tggggctgtc      360
acttcttgcc aacccagcac cctcttcctc ttctaacctg cttcctgagg cttctgctct      420
tcacctcctg ctcgctgatg gaaacctcca gggcaaagct gaaggtttct tgggggaagcc      480
aggaaagcca gtatttccta tgtgtcagat ctgcttggct tccaagaagg gatgcatggg      540
ctttttggcc agtttccagg aggctctggg cttcctgctt cttccccgct tcccccagag      600
ttcacagatg ttgaagtttc tgaaggttga cgtcactgga agtctgacca caaacaagtt      660
ggctgttact gtatttgaaa cccagtacct ttggcagctc acctctaacc agtaaaaaaa      720
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaa           775
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<210> 29
<211> 1044
<212> DNA
<213> Homo sapiens

<400> 29
gctaatctca acgttttaag aaagtttatg aatttgtgtt ggactgcttc aaagccatcc        60
taggccgcag gttggacaag cttgctttat acctcatagt tagagaaggt aatatttagc       120
aagcagagtt gttaaagagg aaggccttgg ctactcaggt tatatgacag ataggattca       180
tttaggtcaa tgcaaggatc caggggagag aacctctgtt tacttcattt gtctccccat       240
ctcaaaagga ctaatatcct tgtaaatagg agtgtgcaga gctgtttgag aacactgctc       300
gtcacttcca aaccccacag gctgaatgat gattgccctc ctgatctcta agaaatggag       360
tatgttaggg cttaggcctg gggcccttta tcttctctgt cttcatctct tcttaggtga       420
tctcacccag taccatgctg tcaataagct gatgactccc aaatctatat atccagccct       480
ggttcctctc tgggctccac tcaacatctc ctccccaacc ttcctcctct caatgaaaag       540
cactcaaatg cccagttgct aagaccaaaa acatggtatg tctcactttc cctcacctcc       600
cacatctaat ccatcagcag ttcctgtcag ttttacatct aaaatactgt gtacctgaat       660
ttgaccactc ctcatcattc ccactcctac caccatatat ttcaggtcat cttcccctct       720
ctggactgtt gcaatggtct cttcccccg tctctgcttc cattcccatc ccccaacaat       780
atattctgca cagaactgtg agagatgatc atacgaaata atataaggtt tgagatgtac       840
ttcaaaagaa tttgagaaat aggggctag atgggtatag agatgaaaag attatccata       900
caatgataat tattgaagct gactgaaaag ggtacatggg gttcatgata ctattttctc       960
tactgtgttt gtttgaaatt ttccataata aaaaagttg aaggaaaaaa aaaaaaaaaa      1020
aaaaaaaaaa aaaaaaaaaa aaaa                                             1044
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<210> 30
<211> 2259
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (1919)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1960)
<223> n equals a,t,g, or c

<400> 30
gataatattt aatgttgttc tgcacatctc tatacagtta acttttggc tttcattctg        60
tatagataag aaaatgttat attataaaca gcctactcag tgcaaatatt tatctgttta       120
tcaaatccac aatatgctgt ataataccgg ttttactata taatctattt tagacatagc       180
tgtttagaac tagagtgtgc tattttttgtg tttttctgat gtgtggtgct agacaagtta       240
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cttttgtgaa caacaaaaat tatccctttt attcctagac aataccacct ttgggtcttg        3.00
ttaatttcac tgagtataac tatatatttg tatatatata catatatata tatatctacc        360
tatgcccaac tggcagctgt atcagagtgc tggatttggg acatgctttt ctctttaaat        420
acataatatc attatataaa ttattctaga gtgtatttaa ttaggataaa attacttcct        480
tagtatggat atttgacatc tataggggtga atttgtttat aaatatggct atatggaaac        540
ttattagcat ttactttatg tttgctactt ggctttacag catatctcct aagctgaaaa        600
ataatttgcc aggccttcaa gatcctaaag aaacttgttt aatggagtaa tatacttttt        660
tttcttatta aggaattgta ttactggcac ctaacacagt tgtattctta gctcctatta        720
tagataatgg gcatttacat aaaatatcct agatggcttg atggcagaat aaacctttcc        780
cctcctacct gagtcatgag aaggatggag acgtcctctg ccataacatg ggccataaag        840
caaattcgac atgggatgtt ctgtttcagt atgacctcaa ccagttccat gaactgagtg        900
aaggaccttc attttcaaag ttatttaata agtagcttaa ttaagccttt ctacccattc        960
tcccaagatc tattggcatt attgaaaagc aaagtttatc aaatatctaa ctaaggatgt       1020
agttaacctt attaaatatt gattagaatt gttctgtaat attactgaat ttgtaagatc       1080
tttagcaaag attttgagc aatttataaa tgtagagcaa atgtttctgt ttactgcact       1140
ttttgtaact gaaggtgata aattctcaag ccatgattat tggcttccat gcactgcart       1200
atttatccac aattctagac attttccatt tttgtggaag agttgctgtt accttaatta       1260
taaatgcaat tgtgtggtta atgagagcta atgctagtag ttaacctttt aaagtggatt       1320
ggctacagtt gagggagaaa tctcttttaa tataaatcac atcattcctt aactgcctct       1380
cttggaaaga gattgaaacc ttttttttaa agcacgattt agcatcctaa gcttcctgag       1440
ggtagagatt gkatcttttt gcgtctgcac aatggctagc acatgtcagc atttgacaat       1500
tgttaaatga taacaagtgt gccccaatta aaacgtttty cctgggttgt ttkgttaaat       1560
ttacaaagta agccaagcct tacggttaac attctcctct acaaccaagt attaaagcca       1620
catttaaaaa gaccacatga aatgctgatt ctaattgtgt gtaggtcttg aggattaagc       1680
acacaaattt cacaaacttc tgtttgagta aacaaactca gccttctgta aatatacatg       1740
caagtttgga aacagtaata ctgtacctat aaatatatgc tgtctgtttt gtgtacagta       1800
tgtaaaaact ccttttctgc cacactaaaa atgcaagcca tttatgggga atcctaaaac       1860
tagtattgaa ctaaaacttt gctaatgatc tttattagag gatcgtccaa cttttycacnt       1920
taccytgggt tttcttttcc aattcactct tacactagtn ctgcttattt cccagctgtt       1980
tattttattg agtcctgaat ttaaaaaaaa aatattttga ttcattttgt aaatacaagc       2040
tgtacaaaaa agagagattt aatgttgtct tttaaatact ccaattttca ttctaatatg       2100
aatgttgtta tattgtactt agaaactgta cctttaatat tacattacct ttattaaaag       2160
tgcattgaac acatcaattt tagatgtgct ttatgtactg ttatcctata ataaaacttc       2220
agcttctaat ggaaaaaaaa aaaaaaaaaa aaactcgag                              2259
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<210> 31
<211> 1313
<212> DNA
<213> Homo sapiens

<400> 31
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ctgcaggaat tcggcacgag gtcttgctgt gttgctaatg ttgaactcct ggccctaagt         60
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tttctaggtc tttcctgtca ggtccaccaa tattttagat ggatggagca cttgattaga        180
tcaggagtca aaattctatt cctgaatcta ttacttacca gttgtactac tttgaatgaa        240
tggcttaatt ttttagtgac tttgaattgt tccagatata aaatgacagg ataggtctag        300
agagttgcct tagatgaatt aggaaacagt ttctgagata gagatgttag tgcagtaggt        360
ttattgggga gtgttctcag gaatgcctgt ggggaagtga aggatgtgga ggaggaagat        420
ggactggaat tcatttgcca gagtcctcag cagatcctac cagcwctaga gctgggatgg        480
cccttcagag ttatcctgat ccacaagggg tcagcccta ggcattcata agtcactttg        540
tccagtcatt ggggttgacc ccaggaaaag gtatggtttg gggtaagagg actcttcagt        600
tgagggtagt tcctaggaag ctagtgagct atgagttggc atcaggcaac atttccagca        660
atttggtcaa tgagttcccc ttaaggctgg atctgggcca cggaccatgg cactcactgc        720
catattcaca gcgtcgtttt cagtgtgaaa ttctactgtg ttaaagtatt gtacagtcac        780
tgaaatgaga gtattttat atttggctac ccatgacatt tattctcttc tgattatatt        840
gtttctctcc tgatctagag ttttagattg ttttgtttgt ttgttttgt ttcctgtac        900
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ttttctgtct gttgaggaaa aagagtttta ttcttctagt atgagagttt ctattagtcc      960
tccttttttag acagatgaac accctgtgac aattccttttt gtctttttgt ggcgtgtaaa     1020
aaaaaagaaa tccataaata gagtcgttac gcaagtcttc atgagttaat ttctctctcc       1080
agttttctta ctacttttttc cagttttcat tttcttcaac agaaagcttc ttcttctggc      1140
tggacacagc gctcacgcct gtagtcccag cactttggaa ggctgagggg gatgtaatcc       1200
cagcactttg gaaggctgaa ctcctgagtt caggagttcc agaccagcct gggcaacatg       1260
gcgawactcc caactctaca aaaatacaa aaaaaaaaaa aaawactcg tag                 1313


<210> 32
<211> 418
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (396)
<223> n equals a,t,g, or c

<400> 32
aattccattt cttatgtatg gttaacctta cggttcctcc tcttcttcta ctctatgtgc       60
ttggccatgg aaagccaaag gaatgcctac ggtgctcttc tggcctctcc aaaagctaca       120
cagacctggg aaggaggtct gcagattcca acattcatt gaagtgagag gatgctttttt       180
ccttcttgga gtctacatac ttactctcag tgattctctc gaagtctcta cttctgactc       240
agagagatga aagagaagga actgtcccctt accacaaact gcactcccca caaagcttac       300
tacccctccc tacctgagtc tcgcttgaac tcggggaggc agaggttgca gtgagccgag       360
attgcgccac tgccttccaa cctgggcgac agagcnagat cttgtctcag gaaaagga        418


<210> 33
<211> 3102
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (3096)
<223> n equals a,t,g, or c

<400> 33
tcgacccacg cgtccgccca cgcgtccggc ccagtagttt ttattgttgg gttttttgaaa      60
aaacctctac caagaatatg gtgtttttttt tgtttgtttg ttttagaaaa attgggggattt    120
cccccacccc cgccccaccc agataaacta tatctacact gtctcgtcaa gttctctgac       180
acgatctttc tgggctctac atttcctact agtttgtgtc cagaaactgc aagttgacat       240
gaatagagga caaaggttgt gtcttgcttt tgtctctctc ttccctccct gcaactctct       300
cksscctcct cccactctct tcccctcccc cctcctccca ctgtctctca cctcccccac       360
cccccactct ctctcatctc tcgctgtgtc ctgtgtatgt gtgggtgtgt gtgtatttgg       420
gtgtgtaaat gttggttctt ccactactgg attttgtaat ctaggataaa tcacttttttt      480
tggggacttt gattttgctc cattacgttt tcatttttttc tgagcactga ctgttctgaa      540
agctgcacaa aacgtagaaa gaagacatag cgcctgccag ggaataggaa atgagggcac       600
ttacacatta atgtgaatta gtaattgtgg tatagaaatg ttttatagtg aaagattcaa       660
atttgcttttt caagaaaaat gccaaaagct atttaaataa ttcgaggtta catcgtargt      720
tttgattttt ctcaatttaa gatacagaaa tacagcaagc cttaatataa agtttcctaa       780
agtttcttca agtattttttt aaggtggaga aatgcaggaa ttgtataacc agaattgttt      840
ctgcctttag cttttttcagaa cttgagatgt ggcagcactg gactgggttt ttttaaatgt     900
taggactagg aatgtttgct cttgttaatt atgaattaat tgattattaa gtttagaatg       960
catttttaca agtatctaac tatcaaattg tgtttagtaa cttgagtgta tgcacaagtt       1020
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tgatcaacag caaaatagag ttctgaattt cttttaaagt gatgatatat tattttgtga    1080
aactttgtgt ttgaaaatgt ttatttctgt ttatggtgta atcattctga ggtgaggctt    1140
ttcttatttc ctttgcattt tgctagagct gtgctgagtt cagcatttgc ttatttaacc    1200
actacataat gacagaccag ttattaggta ttagcatgtg tggtaataat aatagtggaa    1260
cttcacactt acatcaattc agtgcagggg catagaataa aatattaaat attggcagat    1320
gtatgaaaag aagtgtgagt taaaaatatt gaatattggc aggtgtgaaa acaagtgtca    1380
aaattcctca tatagagaaa ataattttga gtttagagta ttatctttta attaagtgta    1440
gtctaaactt aactttctgt aaaggcactt tgtggttttty ccaaagatgt tctagatcta    1500
tttggttgct ctatagtcaa acagctcttt tgaagacaac tgtcttattt tattacaaat    1560
tggcttgaca tatyyatact gtaacattgt aatattgctg tgctgtacat tttggccctt    1620
ackaaatacg tcttttttcag aactgttaaa gttttgatgt acatcragct gaattctgtt    1680
tttaccagtt tcaaaacctt caagtgatat gtggaaaaaa gtgaatgaga cctctgatag    1740
ggggttttca gaaccttgtt cacaccaaaa tgtgacagtt ctttcatgtt ttcctaaacc    1800
aagttaaaat tacatgtata ttttggtgtt aaggttgatt tttaagatac ttctgatttg    1860
tacaaaagga atgtttcctt tataaatcac agaagaaaat gacaatatct gttggatatt    1920
tgatataatt taatggtgtt ataaaacctt taagaggatt catggtgaat atatgtgata    1980
acatctttat actttgaaaa atgttccact taccctttcag atatttgttg taagttaatt    2040
caattcttaa tactttaatt ttgctccaac aagggcttta tgttgctggt aagagaattt    2100
atttactaaa tgcactatgt ataaagtgaa agatagttta cttatctgac tttgatatta    2160
gatggctgac attagtgcac ataatgcaga gtttaacctt gattcttcaa cagagtccag    2220
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ttttcccatca gtatatcact ttaaatttta tgttttttcta aggaaacttt ccacagaatt    2340
ttaaacaact gatgcatcca tactcagggt gtagggagaa tactttgcat ttaaaaaccc    2400
tgtccacctg tcaccagcac aagagaatta gagcttcagt gagaatttag aaaaattata    2460
ctaaagtgag atgcattttt tctcatttttc agcaagactc ctctaagcat ttactcattt    2520
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agaagttctt attttgtttt tgttgtaatg tttgaatact atttaatatc cggtttttaat    2700
attgctggat ttgctacctt tggttacttg tgcagtgtta aaagtaatcc actttcttgt    2760
ttaatatacc agatacatag caaaagcagc ttggaataat tatagctgtt tatttggctg    2820
tgctcagtta ctatattaag atcttgtact gtgtaacagt aactcttttt tgcttttcag    2880
taatttaata tgttcactta acaaaatacg aactttgaga tgcactaaag ttttgtttca    2940
gcagtggctc aaaaaatttc agaaattact tttgtaatta tttgcaatta attgttcttt    3000
tatcttacaa ttgtttaagc ctgtgatctt tcttctccca gctaagagtt cttcaataaa    3060
tttaagaaat acaaaaaaaa aaaaaaaaaa aaaanaaaa aa    3102
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<210> 34
<211> 2441
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (2408)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (2409)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (2435)
<223> n equals a,t,g, or c
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<220>
<221> SITE
<222> (2438)
<223> n equals a,t,g, or c

<400> 34
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gggtttctcc atagcataaa tgaaaaaaaa aaaaaaaaaa gtaaacaggg cagtgtgtgc        60
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catcatccca cctatctgtg gttgcttccc aagacctcct cccaagatag acatctccta       180
cccagtgccc ttgtgtgacc ccaggactca agtctcagac tgtgaacaga tgtggccatg       240
cccagagacg ccagcctggc cagaagggca tgcctcagct tactacttca tctctcctgg       300
ttccctccct gcagtgcccc gggtgtcatc ttctcccact ctgggtacca gggattctac       360
cacataggct tcccaaagcc ccattctaac tcccctctct cagggaagcc ctagagagag       420
gtccaaaaag cattcacagc tgtatcacac tctatgcagg tggggtagga gactgatcag       480
gcctgctgtg gggaagcagt atgtatgaac acagccagaa atgtcatagt ccaaacagga       540
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acatttccac aagaaagaaa atattaaggg gttatttcca cagargccca aaacgtcttg       780
gaaacacaga ggtgaggagg aggaatagta attgtcaatg agcttttaat accaagatac       840
acccctgcc cccaagaag agtcctcttt tagggaatca gaaccttcat tgtcctagaa        900
gctgaaagat tcttggaaca ttttagcttt tactctcaac ttgctgttct cttttacattc      960
cttaagttag actttcgggt gtggcttctc tcccaggggt aacatttact tccatttct      1020
agaccgaacc aaaagtcttc tgcagaatct cccaccgagt gtggtaagaa ggaaggacaa     1080
aaggctttag gatataaatt tcatgttaca gagcatgtca ytgtcaaagg aaatctgtgg     1140
ccctgagatt ttaagaacat aaaatgtgac atttgatatt tctccagccc agggaagtaa     1200
gatggttagc aatggttgcc ttaatcaaat ggtcccattt ttaaccccaa aggaagtgcc     1260
cacagcaaga ggtttgtgtg atgcacttat gtcctccggt gaggaaaggg ggccacatat     1320
gaaaggcccc ttaggtcaga tcctgagagt agcacatttg agtgcagatt cctgggcccc     1380
acctcaaacc tactaattct gaatctctgg gaataggggcc aggaaatctg ccctttctac    1440
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ggaagagaga agggaggagg ttccaagtag taactggcag atcctcctgt ctggaggtac     1620
caccttctat tctggttttct gactttcct tcttgatgac catagatgtg ttccagaggc     1680
aaaagagaca cattatccca gatggcagaa catgctttca aaacatataa aatgtcaaag    1740
ttccagatcc ttctacatct ttagtcctgt ctgaggatgg tagctggctc tctgtagctg    1800
atagatggct agagttccat ccaaatcctt gaccacgact tcatggagat ttgaataatc    1860
tatttgatga gatttctatt tcaataaccc acctctctca ccccacattc atatccctaa     1920
atttgaccct ctgggccgag tcacattacc ttcaggagac ttgatcccag tagactgagg    1980
tcttcccttt cagcagaaag atttcatttc cctggcttgc cagtggcact gatttccgaa    2040
cacccaatga gtttaatatt cttcctcct tggcattact gccccagcct cttttattt      2100
ttttgtgtg tgtctaataa ccaggaaaaa aataaagctt aggtttaaa aagttttaaa       2160
aataatctgt ttcagaaact gtcaaatgta ccatatttgt attaagagtt gttgggaatt    2220
tttgtacaat gaatttacat ttatttatgg tgacatattt acgcttgtga tcaaataatg    2280
atgttaaatt cttaaatcat atttgctatg cagctgaaga tgatattttg atttgtattt    2340
tggggggtacc tgtgttgagt tgataaacat ttccatcttc attaaaactg cttccaaact    2400
agtaaaanna aaaaaaaaaa aaaaaaagg ggggnccncc c                         2441
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<210> 35
<211> 1092
<212> DNA
<213> Homo sapiens

<400> 35
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cagcttggaa aaattgttgg ccattgtctt ttcaaaaata tccttgcttc attttctct        60
tctttttttg agactctagt tgtacccata gtgaacattt gatatgttca caggcctcgg       120
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atgctctgtt tttctcctct ctgccgccga ctcttttttc ctctcctatt tcagtgtaga    180
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agaattcatc tttgatatcc tgttttcat ttccacttcc atttggcttt taaaaatgta     300
tagcttccat ttctctgctg aaatttcctg tcttttcaca gatatttatc acagttattt     360
taaatcttca tctgatgagt ccaacatcca ggcttggtcc ctcattctgt taactgtttg     420
tttctttaca gtgggtcaca tcacttcttc gagggtcttt taatttttaa gtaaagtaaa     480
acctggtgtg taaaagaatg acagagacag aaataacact agaagctgaa gtaaataata     540
tttacatcag tccagaaaac agcatgcctt ttctgttcaa acccattcgt gtgtgtgtgt     600
gtgtgtgtgt gtgtgtgtga gttaatttag tatttatagt tgaaccgggc ctgggctgta     660
ttgctgctta agttagattc aagacctcac aaatatcaaa ttaattgaag gtaggattat     720
aaccttccca cttgtagtgg cttaggatat gaatgcctgg aaggtgtgtc tattttcctg     780
ccctgccatt ggacttcagc aggctctgtg tgtgtgctga gccttgtggg cgagagcctt     840
tcagttccct catcccttc caaccaagat ggacctcttc ttggtcctgg gtgaggccta     900
gagtgccagt gggaatcata atatttgcct catgtgatta taattcactg gtcaattaga     960
caacatataa aaacacctca accatctcag tcacgtatta agtgatagct gttattacat    1020
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<210> 36
<211> 711
<212> DNA
<213> Homo sapiens

<400> 36
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aatgcagtta caagtggagt ctcaatcaat cccagaggaa attctgggac ttcagcctca    130
gcttgaccta tggggggggct ctggaatgtc agatttctcc tgatcccaac tgtgctctgg    240
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tggcccaagg gtgatcctcc agaggaggtt acactgccga actgggacat tggcaccctg    360
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gctgactccc ttttaatact tctaattttc cctgaagatc tggtcttctc cctaccacca    540
ctaccctatt acataagaga aaaggattgg agaatgctct tgaaaagaat gtgatgctttt    600
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<210> 37
<211> 1209
<212> DNA
<213> Homo sapiens

<400> 37
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tgcaggtgcc tgtgtactcg gagcaggagt accagcttta tctccacgat gatgcttgga    180
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ttatccatga ccggtatgac caccagcagt tcaagaagcg ttctgtggaa gacctgaagg    300
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tctacaaccg daccccagag caggtggcag aggaggagta cctgctacag gagctgcgca    480
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<211> 1457
<212> DNA
<213> Homo sapiens

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tgctcagcct gtgcttcttt ccttggcctt tgtgtgtgct gtcctcttcc cctgcacatg        360
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gattgaatga ctgaacagaa tgggtggcag tggtgatctt ggtcccctgc tttgcttgga        540
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aaaaaaaaaa aaaaaaa                                                      1457


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<211> 1580
<212> DNA
<213> Homo sapiens

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gcggggacat ttatgttcta ttgtgcgcac tggcaaacgt atgtttctgg aacattgcga        180
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<210> 40
<211> 1405
<212> DNA
<213> Homo sapiens

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atatttatct tgtttggaac cttttatttttt tagtggagac accaagtctc agagagataa       180
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<210> 41
<211> 2761
<212> DNA
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<213> Homo sapiens

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<222> (1006)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1376)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (2211)
<223> n equals a,t,g, or c

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gaatatgaga atatcatcca agatttaaat accaattacc aaaatttaca gctatcaaat       180
ggaagactca ggtttatgct atgccacgtt ttctcttctt tccttttgt gatggtgttc        240
caaattgtgg agaaagaaaa cattctattt gtgattgctc ctgctagtta cttctgcaaa       300
acaaactact caaattcagt ggtgtgatgc aataaccatt tgtcatcctc atatattctg       360
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<211> 3758
<212> DNA
<213> Homo sapiens

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aaagtattct gctcatgtgc ccccaaaagt attttgaaaa atcatgtata ccctcaccca    3600
tctaagttga tatctaaaat tttatctaag ttggtatcta aaattttca tgggaagtta    3660
aatagttgac aaagtatgta tttgctggtg tcgtgtaaat attggtattt taaaataaaa    3720
actgttacat cactaaaaaa aaaaaaaaaa aaaaaaaa                            3758
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<210> 43
<211> 2860
<212> DNA
<213> Homo sapiens

<400> 43
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ccacgcgtcc ggactctggg ccccactcaa tctgtttctc tcacgcacac tttgtctctg      60
gggcacccag gccttccctg ccatgcgacc tgtcagtgtc tggcagtgga gccctgggg     120
gctgctgctg tgcctgctgt gcagttcgtg cttgggggtct ccgtcccctt ccacgggccc     180
tgagaagaag gccgggagcc aggggcttcg gttccggctg ctggcttcc ccaggaagcc     240
ctacgagggc cgcgtggaga tacagcgagc tggtgaatgg ggcaccatct gcgatgatga     300
cttcaagctg caagctgccc aaatcctctg ccgggagctg ggcttcacag agccacagct     360
ggacccacag tgccaaatat ggccctggaa cagccgcatc tggctggaca acttgagctg     420
catgggaccg agcagatgtg actgaatgtg cctccggggg ctgggggaac agtgactgta     480
cgcacgatga ggatgctggg gtcatctgca aagaccagcg cctcctggtt ctcggactcc     540
aatgtcattg aggtagagca tcacctgcaa gtggaggagg tgcgaattcg acccgccgtt     600
gggtggggca gacgacccct gcccgtgacg gagggggctgg tggaagtcag gcttcctgac     660
ggctggtcgc aagtgtgcga caaaggctgg agcgcccaca acagccacgt ggtctgcggg     720
atgctgggct tccccagcga aaagagggtc aacgcggcct ctacaggct gctagcccaa     730
cggcagcaac actcctttgg tctgcatggg gtggcgtgcg tgggcacgga agcccacctc     840
tccctctgtt ccctggagtt ctatcgtgcc aatgacaccg ccaggtgccc tggggggggc     900
cctgcagtgg tgagctgtgt gccaggccct gtctacgcgg catccagtgg ccagaagaag     960
caacaacagt cgaagcctca ggggggaggcc cgtgtccgtc taaaggcgg cgcccaccct    1020
ggagagggcc gggtagaagt cctgaaggcc agcacatggg gcacagtctg tgaccgcaag    1080
tgggacctgc atgcagccag cgtggtgtgt cgggagctgg gcttcgggag tgctcgagaa    1140
gctctgagtg gcgctcgcat ggggcagggc atgggtgcta tccacctgag tgaagtcgct    1200
gctctggaca ggagctctcc ctctggaagt gccccacaa gaacatcaca gctgaggatt    1260
gtcacatagc caggatgccg gggtccggtg caacctacct tacactgggg cagagaccag    1320
gatccgactc agtggggggcc gagccaacat gaggggcgag tcgaggtgca aataggggga    1380
cctgggcccc ttcgctgggg cctcatctgt ggggatgact ggggggaccct ggaggccatg    1440
gtggcctgta ggcaactggg tctgggctac gccaaccacg gcctgcagga gacctggtac    1500
tgggactctg ggaatataac agaggtggtg atgagtggag tgcgctgcac agggactgag    1560
ctgtccctgg atcagtgtgc ccatcatggc acccacatca cctgcaagag gacagggacc    1620
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cgcttcactg ctggagtcat ctgttctgag actgcatcag atctgttgct gcactcagca    1680
ctggtgcagg agaccgccta catcgaagac cggccoctgc atatgttgta ctgtgctgcg    1740
gaagagaact gcctggccag ctcagcccgc tcagccaact ggccctatgg tcaccggcgt    1800
ctgctccgat tctcctccca gatccacaac ctgggacgag ctgacttcag gcccaaggct    1860
gggcgccact cctgggtgtg gcacgagtgc catgggcatt accacagcat ggacatcttc    1920
actcactatg atatcctcac cccaaatggc accaaggtgg ctgaggccac aaagctagtt    1980
tctgtctcga agacactgag tgtcaggagg atgtctccaa gcggtatgag tgtgccaact    2040
ttggagagca aggcatcact gtgggttgct gggatctcta ccggcatgac attgactgtc    2100
agtggattga catcacggat gtgaagccag gaaactacat tctccaggtt gtcatcaacc    2160
caaactttga agtagcagag agtgacttta ccaacaatgc aatgaaatgt aactgcaaat    2220
atgatggaca tagaatctgg gtgcacaact gccacattgg tgatgccttc agtgaagagg    2280
ccaacaggag gtttgaacgc taccctggcc agaccagcaa ccagattatc taagtgccac    2340
tgccctctgc aaaccaccac tggcccctaa tggcaggggt ctgaggctgc cattacctca    2400
ggagcttacc aagaaaccca tgtcagcaac cgcactcatc agaccatgca ctatggatgt    2460
ggaactgtca agcagaagtt ttcaccctcc ttcagaggcc agctgtcagt atctgtagcc    2520
aagcatggga atctttgctc ccaggcccag caccgagcag aacagaccag agcccaccac    2580
accacaaaga gcagcacctg actaactgcc cacaaaagat ggcagcagct cattttcttt    2640
aataggaggt caggatggtc agctccagta tctcccctaa gtttaggggg atacagcttt    2700
acctctagcc ttttggtggg ggaaaagatc cagccctccc acctattttt tactataata    2760
tgttgctagg tataattttta ttttatataa aaagtgtttc tgtgaaaaaa aaaaaaaaaa    2820
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa                          2860
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<210> 44
<211> 1691
<212> DNA
<213> Homo sapiens

<220>
<221> SITE
<222> (167)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1631)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1653)
<223> n equals a,t,g, or c

<220>
<221> SITE
<222> (1660)
<223> n equals a,t,g, or c

<400> 44
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aaccaaaaag cttggaagct tcggggcggc cttgcaaggt tcgaccacta agtggattcc     60
aaagaatttc gggcacgaag gttgatggac cgccacggct tacaaggccg ggatcctgct    120
gggcctgtgc ctgtatgcgg cgggcgcgct gctgttcatg ccggcgncgg carcggcgag    180
ctttccgttt ttcctgttcg cgctgtttgt catcgcctgc ggcctgggct gcctggagac    240
cgctgccaac ccctatgcca cggtgctggg ggaaccccag ggcgccagc ggcggttgaa    300
cctggcgcaa tcattcaatg gccttggcca gttcttcggc ccgctgattg gcggcgcgat    360
gttcttcagc gccggcagca caccggcctc ggacatgagt tcgttgcaga ccacctacgt    420
ggtgatcgcr gttctggtac tgctggtggc gctgctgatc gcccgcacgc cgctgccgga    480
```

```
tttgcgcgcc caggaacagg cactgcaacc gacggccggc aaaggtctgt ggcagcaccg    540
ggagtttgtc ggtggsgtga tcacgcagtt tttctatgtg gcggcccagg tcggagtcgg    600
cgcattтttc atcaactacg tcaccgagca ttgggcacag atgggcaatc agcaagccgc    660
ctatctgctg tcgatcgcaa tgctggcctt catgttcggg cgcttтttca gtacctggct    720
gatgggccgg gtcagcgcgc agaagctgct gctgatttat gcgctgatca atatcgcgtt    780
gtgcggcctg gtggtgatcg gcctggaagg tatctcagtg atcgcgctga tcgcagtgtt    840
cttcttcatg tcgatcatgt tcccgacgct gttcgccatg ggcgtgaaga acctcgggcc    900
gcacaccaag cgcggcagtt cgttcatgat catggcgatc gtcggcggcg ccctgatgcc    960
ctacttgatg ggcaaggtgg cggacaacag cacggtggcg ctggcttacc tgttgcctat   1020
ggggtgtttc gtgattgtgg cggtgtatgc ccgtagtcgc ttgcgccatc cgtgaagtac   1080
cgscccggcg tcgtcccgaa cgtacgccgg aacatcgcaa twawggcact gacgttttca   1140
taacccaggt ccagcgcaac ccgggtcacg ggtgcatgcg ccgccagcaa ctccagggcg   1200
cgcaacaatc gcgcgcgctg gcgccactgg ctgaaggtga accggtctc ggcaacaaac   1260
cgccgggcca gggtgcgcgg cgagacaccg gcccactgcg cccagtgttc cagcaggcgg   1320
ttgtcgtcgg gactgtcggc cagcgcctgg gcgatgcgca acaggcgcgg gtyccggggc   1380
agcggcaagc cgaatggttc ctggggcaac ccggcgattt catcaaggat catctgggcg   1440
awccgtgact gtggcggctc gagagtactt ctagagcggc cgcgggccca tcgattttca   1500
cccgggtggg gtaccaggta aagtgtaccc aattcggcct atagtgagtc gtattacaat   1560
tcactggccg tcggtttaca acgtcgtgac tgggaaaacc tggcggtacc caacttaatc   1620
ggcttgcaag nacatttccc ccctttgcag tgngaatacn aaggccgacg atcgcctttc   1680
aaagttggca a                                                        1691
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<210> 45
<211> 121
<212> PRT
<213> Homo sapiens

<400> 45
Met Ala Ser Cys Leu Ala Leu Arg Met Ala Leu Leu Leu Val Ser Gly
1   5   10   15

Val Leu Ala Pro Ala Val Leu Thr Asp Asp Val Pro Gln Glu Pro Val
            20   25   30

Pro Thr Leu Trp Asn Glu Pro Ala Glu Leu Pro Ser Gly Glu Gly Pro
        35   40   45

Val Glu Ser Thr Ser Pro Gly Arg Glu Pro Val Asp Thr Gly Pro Pro
    50   55   60

Ala Pro Thr Val Ala Pro Gly Pro Glu Asp Ser Thr Ala Gln Glu Arg
65   70   75   80

Leu Asp Gln Gly Gly Gly Ser Leu Gly Pro Gly Ala Ile Ala Ala Ile
                85   90   95

Val Ile Ala Ala Leu Leu Ala Thr Cys Val Val Leu Ala Leu Val Val
            100   105   110

Val Ala Leu Arg Lys Phe Ser Ala Ser
        115   120

<210> 46
<211> 64
<212> PRT

<213> Homo sapiens

<400> 46
Met Phe Met Trp Thr Ile Ser Ile Val Thr Phe Ser Ile Pro Leu Thr
 1   5   10   15

Leu Pro Leu Pro Leu Arg Gly Glu Asn Lys Thr Leu Asn Gly Ser Asn
             20   25   30

Ser Tyr Val Phe Tyr Phe Val Ser Glu Val Ser Lys Leu Leu Leu Leu
         35   40   45

Ala Ser Phe Ser Leu Gly Gln Met Asp Val Ser Tyr Phe Pro Val Ser
     50   55   60

<210> 47
<211> 40
<212> PRT
<213> Homo sapiens

<400> 47
Met Phe Val Phe Ser Leu Leu His Phe Gly Val Leu Leu Leu Gln Cys
 1   5   10   15

Asp Pro Cys Trp Ala Phe Leu Tyr Asn Gln Gln Leu Asn Leu Leu Pro
             20   25   30

Asn Ala Cys Leu Pro Phe Ile Phe
             35   40

<210> 48
<211> 340
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (334)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (335)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 48
Met Pro Gly Trp Leu Thr Leu Pro Thr Leu Cys Arg Phe Leu Leu Trp
 1   5   10   15

Ala Phe Thr Ile Phe His Lys Ala Gln Gly Asp Pro Ala Ser His Pro
             20   25   30

```
Gly Pro His Tyr Leu Leu Pro Pro Ile His Glu Val Ile His Ser His
        35                  40                  45

Arg Gly Ala Thr Ala Thr Leu Pro Cys Val Leu Gly Thr Thr Pro Pro
    50                  55                  60

Ser Tyr Lys Val Arg Trp Ser Lys Val Glu Pro Gly Glu Leu Arg Glu
65                  70                  75                  80

Thr Leu Ile Leu Ile Thr Asn Gly Leu His Ala Arg Gly Tyr Gly Pro
                85                  90                  95

Leu Gly Gly Arg Ala Arg Met Arg Arg Gly His Arg Leu Asp Ala Ser
            100                 105                 110

Leu Val Ile Ala Gly Val Arg Leu Glu Asp Glu Gly Arg Tyr Arg Cys
            115                 120                 125

Glu Leu Ile Asn Gly Ile Glu Asp Glu Ser Val Ala Leu Thr Leu Ser
    130                 135                 140

Leu Glu Gly Val Val Phe Pro Tyr Gln Pro Ser Arg Gly Arg Tyr Gln
145                 150                 155                 160

Phe Asn Tyr Tyr Glu Ala Lys Gln Ala Cys Glu Glu Gln Asp Gly Arg
                165                 170                 175

Leu Ala Thr Tyr Ser Gln Leu Tyr Gln Ala Trp Thr Glu Gly Leu Asp
            180                 185                 190

Trp Cys Asn Ala Gly Trp Leu Leu Glu Gly Ser Val Arg Tyr Pro Val
        195                 200                 205

Leu Thr Ala Arg Ala Pro Cys Gly Gly Arg Gly Arg Pro Gly Ile Arg
    210                 215                 220

Ser Tyr Gly Pro Arg Asp Arg Met Arg Asp Arg Tyr Asp Ala Phe Cys
225                 230                 235                 240

Phe Thr Ser Ala Leu Ala Gly Gln Val Phe Phe Val Pro Gly Arg Leu
            245                 250                 255

Thr Leu Ser Glu Ala His Ala Ala Cys Arg Arg Arg Gly Ala Val Val
            260                 265                 270

Ala Lys Val Gly His Leu Tyr Ala Ala Trp Lys Phe Ser Gly Leu Asp
        275                 280                 285

Gln Cys Asp Gly Gly Trp Leu Ala Asp Gly Ser Val Arg Phe Pro Ile
    290                 295                 300

Thr Thr Pro Arg Pro Arg Cys Gly Gly Leu Pro Asp Pro Gly Val Arg
305                 310                 315                 320

Ser Phe Gly Phe Pro Arg Pro Gln Gln Ala Ala Tyr Gly Xaa Xaa Cys
                325                 330                 335
```

Tyr Ala Glu Asn
                340

<210> 49
<211> 43
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (39)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 49
Met Asp Val Pro Gly Met Thr Ser Phe Leu Leu Leu Gly Gly Trp Arg
  1   5   10   15

Ala Leu Val Leu Gly Leu Ser Ala Glu Phe Gln Gly Ser Leu Thr Cys
              20   25   30

Pro Cys Pro Ser Phe Pro Xaa Trp Ala Pro Ser
          35   40

<210> 50
<211> 421
<212> PRT
<213> Homo sapiens

<400> 50
Met Thr Val Phe Phe Lys Thr Leu Arg Asn His Trp Lys Lys Thr Thr
  1   5   10   15

Ala Gly Leu Cys Leu Leu Thr Trp Gly Gly His Trp Leu Tyr Gly Lys
              20   25   30

His Cys Asp Asn Leu Leu Arg Arg Ala Ala Cys Gln Glu Ala Gln Val
          35   40   45

Phe Gly Asn Gln Leu Ile Pro Pro Asn Ala Gln Val Lys Lys Ala Thr
      50   55   60

Val Phe Ser Ile Leu Gln Leu Ala Lys Glu Lys Pro Gly Leu Tyr Leu
  65   70   75   80

Lys Lys Met Leu Pro Asp Phe Thr Phe Ile Trp His Gly Cys Asp Tyr
              85   90   95

Cys Lys Thr Asp Tyr Glu Gly Gln Ala Lys Lys Leu Leu Glu Leu Met
          100   105   110

Glu Asn Thr Asp Val Ile Ile Val Ala Gly Gly Asp Gly Thr Leu Gln
          115   120   125

Glu Val Val Thr Gly Val Leu Arg Arg Thr Asp Glu Ala Thr Phe Ser
          130   135   140

Lys Ile Pro Ile Gly Phe Ile Pro Leu Gly Glu Thr Ser Ser Leu Ser
145   150   155   160

His Thr Leu Phe Ala Glu Ser Gly Asn Lys Val Gln His Ile Thr Asp
            165   170   175

Ala Thr Leu Ala Ile Val Lys Gly Glu Thr Val Pro Leu Asp Val Leu
            180   185   190

Gln Ile Lys Gly Glu Lys Glu Gln Pro Val Phe Ala Met Thr Gly Leu
            195   200   205

Arg Trp Gly Ser Phe Arg Asp Ala Gly Val Lys Val Ser Lys Tyr Trp
    210   215   220

Tyr Leu Gly Pro Leu Lys Ile Lys Ala Ala His Phe Phe Ser Thr Leu
225   230   235   240

Lys Glu Trp Pro Gln Thr His Gln Ala Ser Ile Ser Tyr Thr Gly Pro
            245   250   255

Thr Glu Arg Pro Pro Asn Glu Pro Glu Glu Thr Pro Val Gln Arg Pro
            260   265   270

Ser Leu Tyr Arg Arg Ile Leu Arg Arg Leu Ala Ser Tyr Trp Ala Gln
            275   280   285

Pro Gln Asp Ala Leu Ser Gln Glu Val Ser Pro Glu Val Trp Lys Asp
    290   295   300

Val Gln Leu Ser Thr Ile Glu Leu Ser Ile Thr Thr Arg Asn Asn Gln
305   310   315   320

Leu Asp Pro Thr Ser Lys Glu Asp Phe Leu Asn Ile Cys Ile Glu Pro
            325   330   335

Asp Thr Ile Ser Lys Gly Asp Phe Ile Thr Ile Gly Ser Arg Lys Val
            340   345   350

Arg Asn Pro Lys Leu His Val Glu Gly Thr Glu Cys Leu Gln Ala Ser
    355   360   365

Gln Cys Thr Leu Leu Ile Pro Glu Gly Ala Gly Gly Ser Phe Ser Ile
    370   375   380

Asp Ser Glu Glu Tyr Glu Ala Met Pro Val Glu Val Lys Leu Leu Pro
385   390   395   400

Arg Lys Leu Gln Phe Phe Cys Asp Pro Arg Lys Arg Glu Gln Met Leu
            405   410   415

Thr Ser Pro Thr Gln
            420

<210> 51

```
<211> 641
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (93)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (469)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (486)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 51
Met Arg Pro Val Ser Val Trp Gln Trp Ser Pro Trp Gly Leu Leu Leu
  1               5                  10                  15

Cys Leu Leu Cys Ser Ser Cys Leu Gly Ser Pro Ser Pro Ser Thr Gly
             20                  25                  30

Pro Glu Lys Lys Ala Gly Ser Gln Gly Leu Arg Phe Arg Leu Ala Gly
         35                  40                  45

Phe Pro Arg Lys Pro Tyr Glu Gly Arg Val Glu Ile Gln Arg Ala Gly
     50                  55                  60

Glu Trp Gly Thr Ile Cys Asp Asp Asp Phe Thr Leu Gln Ala Ala His
 65                  70                  75                  80

Ile Leu Cys Arg Glu Leu Gly Phe Thr Glu Ala Thr Xaa Trp Thr His
                 85                  90                  95

Ser Ala Lys Tyr Gly Pro Gly Thr Gly Arg Ile Trp Leu Asp Asn Leu
                100                 105                 110

Ser Cys Ser Gly Thr Glu Gln Ser Val Thr Glu Cys Ala Ser Arg Gly
             115                 120                 125

Trp Gly Asn Ser Asp Cys Thr His Asp Glu Asp Ala Gly Val Ile Cys
     130                 135                 140

Lys Asp Gln Arg Leu Pro Gly Phe Ser Asp Ser Asn Val Ile Glu Val
145                 150                 155                 160

Glu His His Leu Gln Val Glu Glu Val Arg Ile Arg Pro Ala Val Gly
                165                 170                 175

Trp Gly Arg Arg Pro Leu Pro Val Thr Glu Gly Leu Val Glu Val Arg
                180                 185                 190

Leu Pro Asp Gly Trp Ser Gln Val Cys Asp Lys Gly Trp Ser Ala His
```

```
          195                   200              205

Asn Ser His Val Val Cys Gly Met Leu Gly Phe Pro Ser Glu Lys Arg
    210                   215              220

Val Asn Ala Ala Phe Tyr Arg Leu Leu Ala Gln Arg Gln Gln His Ser
225                   230              235              240

Phe Gly Leu His Gly Val Ala Cys Val Gly Thr Glu Ala His Leu Ser
                  245                   250              255

Leu Cys Ser Leu Glu Phe Tyr Arg Ala Asn Asp Thr Ala Arg Cys Pro
              260                   265              270

Gly Gly Gly Pro Ala Val Val Ser Cys Val Pro Gly Pro Val Tyr Ala
          275                   280              285

Ala Ser Ser Gly Gln Lys Lys Gln Gln Gln Ser Lys Pro Gln Gly Glu
    290                   295              300

Ala Arg Val Arg Leu Lys Gly Gly Ala His Pro Gly Glu Gly Arg Val
305                   310              315              320

Glu Val Leu Lys Ala Ser Thr Trp Gly Thr Val Cys Asp Arg Lys Trp
              325                   330              335

Asp Leu His Ala Ala Ser Val Val Cys Arg Glu Leu Gly Phe Gly Ser
              340                   345              350

Ala Arg Glu Ala Leu Ser Gly Ala Arg Met Gly Gln Gly Met Gly Ala
          355                   360              365

Ile His Leu Ser Glu Val Arg Cys Ser Gly Gln Glu Leu Ser Leu Trp
    370                   375              380

Lys Cys Pro His Lys Asn Ile Thr Ala Glu Asp Cys Ser His Ser Gln
385                   390              395              400

Asp Ala Gly Val Arg Cys Asn Leu Pro Tyr Thr Gly Ala Glu Thr Arg
                  405                   410              415

Ile Arg Leu Ser Gly Gly Arg Ser Gln His Glu Gly Arg Val Glu Val
              420                   425              430

Gln Ile Gly Gly Pro Gly Pro Leu Arg Trp Gly Leu Ile Cys Gly Asp
          435                   440              445

Asp Trp Gly Thr Leu Glu Ala Met Val Ala Cys Arg Gln Leu Gly Leu
    450                   455              460

Gly Tyr Ala Asn Xaa Gly Leu Gln Glu Thr Trp Tyr Trp Asp Ser Gly
465                   470                   475              480

Asn Ile Thr Glu Val Xaa Met Ser Gly Val Arg Cys Thr Gly Thr Glu
                  485                   490              495

Leu Ser Leu Asp Gln Cys Ala His His Gly Thr His Ile Thr Cys Lys
```

```
                500                      505                510
Arg Thr Gly Thr Arg Phe Thr Ala Gly Val Ile Cys Ser Glu Thr Ala
        515             520             525

Ser Asp Leu Leu Leu His Ser Ala Leu Val Gln Glu Thr Ala Tyr Ile
    530             535             540

Glu Asp Arg Pro Leu His Met Leu Tyr Cys Ala Ala Glu Glu Asn Cys
545             550             555             560

Leu Ala Ser Ser Ala Arg Ser Ala Asn Trp Pro Tyr Gly His Arg Arg
            565             570             575

Leu Leu Arg Phe Ser Ser Gln Ile His Asn Leu Gly Arg Ala Asp Phe
            580             585             590

Arg Pro Lys Ala Gly Arg His Ser Trp Val Trp His Glu Cys His Gly
        595             600             605

His Tyr His Ser Met Asp Ile Phe Thr His Tyr Asp Ile Leu Thr Pro
    610             615             620

Asn Gly Thr Lys Val Ala Glu Gly Pro Gln Thr Ser Ser Val Ser Lys
625             630             635             640

Thr
```

```
<210> 52
<211> 329
<212> PRT
<213> Homo sapiens

<400> 52
Met Asp Arg His Gly Tyr Lys Ala Gly Ile Leu Leu Gly Leu Cys Leu
  1             5               10              15

Tyr Ala Ala Gly Ala Leu Leu Phe Met Pro Ala Ala Ala Ala Ala Ser
            20              25              30

Phe Pro Phe Phe Leu Phe Ala Leu Phe Val Ile Ala Cys Gly Leu Gly
        35              40              45

Cys Leu Glu Thr Ala Ala Asn Pro Tyr Ala Thr Val Leu Gly Glu Pro
    50              55              60

Gln Gly Ala Glu Arg Arg Leu Asn Leu Ala Gln Ser Phe Asn Gly Leu
 65             70              75              80

Gly Gln Phe Phe Gly Pro Leu Ile Gly Gly Ala Met Phe Phe Ser Ala
            85              90              95

Gly Ser Thr Pro Ala Ser Asp Met Ser Ser Leu Gln Thr Thr Tyr Val
            100             105             110
```

Val Ile Ala Val Leu Val Leu Leu Val Ala Leu Leu Ile Ala Arg Thr
        115   120   125

Pro Leu Pro Asp Leu Arg Ala Gln Glu Gln Ala Leu Gln Pro Thr Ala
    130   135   140

Gly Lys Gly Leu Trp Gln His Arg Glu Phe Val Gly Gly Val Ile Thr
145   150   155   160

Gln Phe Phe Tyr Val Ala Ala Gln Val Gly Val Gly Ala Phe Phe Ile
            165   170   175

Asn Tyr Val Thr Glu His Trp Ala Gln Met Gly Asn Gln Gln Ala Ala
            180   185   190

Tyr Leu Leu Ser Ile Ala Met Leu Ala Phe Met Phe Gly Arg Phe Phe
        195   200   205

Ser Thr Trp Leu Met Gly Arg Val Ser Ala Gln Lys Leu Leu Leu Ile
    210   215   220

Tyr Ala Leu Ile Asn Ile Ala Leu Cys Gly Leu Val Val Ile Gly Leu
225   230   235   240

Glu Gly Ile Ser Val Ile Ala Leu Ile Ala Val Phe Phe Phe Met Ser
            245   250   255

Ile Met Phe Pro Thr Leu Phe Ala Met Gly Val Lys Asn Leu Gly Pro
            260   265   270

His Thr Lys Arg Gly Ser Ser Phe Met Ile Met Ala Ile Val Gly Gly
        275   280   285

Ala Leu Met Pro Tyr Leu Met Gly Lys Val Ala Asp Asn Ser Thr Val
    290   295   300

Ala Leu Ala Tyr Leu Leu Pro Met Gly Cys Phe Val Ile Val Ala Val
305   310   315   320

Tyr Ala Arg Ser Arg Leu Arg His Pro
                325

<210> 53
<211> 40
<212> PRT
<213> Homo sapiens

<400> 53
Met Gly Ala Leu Met Arg Gly Ile Gln Phe Leu Phe Leu Cys Tyr Phe
    1   5   10   15

Ser Ser Ser Cys Leu Pro Ser Glu Val Gln Asn Thr Tyr Pro Glu Val
            20   25   30

Asn Leu Pro Phe Asn Trp Gly Pro
        35   40

```
<210> 54
<211> 74
<212> PRT
<213> Homo sapiens

<400> 54
Met Gly Val Arg Trp Tyr Leu Ile Val Leu Val Cys Ile Ser Leu Ile
  1               5                  10                  15

Ile Ser Asp Val Gln Tyr Phe Phe Thr Cys Leu Leu Val Ile Cys Ile
              20                  25                  30

Ser Ser Leu Glu Lys Tyr Leu Phe Asn Ser Phe Ala His Phe Lys Ile
              35                  40                  45

Arg Leu Phe Gly Phe Leu Leu Leu Met Leu Ser Cys Arg Ser Ser Leu
        50                  55                  60

Tyr Ile Leu Asp Ile His Pro Ser Tyr Ile
 65                  70


<210> 55
<211> 53
<212> PRT
<213> Homo sapiens

<400> 55
Met Pro Ala Ser Cys Pro Gly Pro Gly Gly Asn Gln Gly Leu Leu
  1               5                  10                  15

Leu Phe Phe Val Cys Leu Phe Val Cys Leu Phe Leu Thr Ala Trp Gly
              20                  25                  30

Ser Arg Arg Thr Leu Lys Ala Glu Phe Cys Cys Pro Lys Gly Trp Thr
          35                  40                  45

Ala Met Ile Pro Lys
        50


<210> 56
<211> 57
<212> PRT
<213> Homo sapiens

<400> 56
Met Leu Thr Ser His Gln Pro Thr Ser Leu Ile His Ile Leu Leu Val
  1               5                  10                  15

Ser Leu Phe Leu Ser Asn Pro Leu Cys Phe Gly Leu Leu Ser Val Cys
              20                  25                  30

Pro Leu Gln Asn Ser Tyr Val Glu Ala Leu Thr Pro Asn Met Thr Leu
          35                  40                  45
```

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Phe Gly Asp Glu Ala Leu Ile Ile Ile
    50                  55


<210> 57
<211> 332
<212> PRT
<213> Homo sapiens

<400> 57
Met Leu Pro Arg Leu Leu Leu Leu Ile Cys Ala Pro Leu Cys Glu Pro
  1               5                  10                  15

Ala Glu Leu Phe Leu Ile Ala Ser Pro Ser His Pro Thr Glu Gly Ser
              20                  25                  30

Pro Val Thr Leu Thr Cys Lys Met Pro Phe Leu Gln Ser Ser Asp Ala
          35                  40                  45

Gln Phe Gln Phe Cys Phe Phe Arg Asp Thr Arg Ala Leu Gly Pro Gly
      50                  55                  60

Trp Ser Ser Ser Pro Lys Leu Gln Ile Ala Ala Met Trp Lys Glu Asp
 65                  70                  75                  80

Thr Gly Ser Tyr Trp Cys Glu Ala Gln Thr Met Ala Ser Lys Val Leu
              85                  90                  95

Arg Ser Arg Arg Ser Gln Ile Asn Val His Ile Pro Val Ser Arg Pro
          100                 105                 110

Ile Leu Met Leu Arg Ala Pro Arg Ala Gln Ala Ala Val Glu Asp Val
          115                 120                 125

Leu Glu Leu His Cys Glu Ala Leu Arg Gly Ser Pro Pro Ile Leu Tyr
      130                 135                 140

Trp Phe Tyr His Glu Asp Ile Thr Leu Gly Ser Arg Ser Ala Pro Ser
145                 150                 155                 160

Gly Gly Gly Ala Ser Phe Asn Leu Ser Leu Thr Glu Glu His Ser Gly
              165                 170                 175

Asn Tyr Ser Cys Glu Ala Asn Asn Gly Leu Gly Ala Gln Arg Ser Glu
          180                 185                 190

Ala Val Thr Leu Asn Phe Thr Val Pro Thr Gly Ala Arg Ser Asn His
          195                 200                 205

Leu Thr Ser Gly Val Ile Glu Gly Leu Leu Ser Thr Leu Gly Pro Ala
      210                 215                 220

Thr Val Ala Leu Leu Phe Cys Tyr Gly Leu Lys Arg Lys Ile Gly Arg
225                 230                 235                 240

Arg Ser Ala Arg Asp Pro Leu Arg Ser Leu Pro Ala Leu Pro Gln Glu
```

```
              245                250                255
Phe Thr Tyr Leu Asn Ser Pro Thr Pro Gly Gln Leu Gln Pro Ile Tyr
        260                265                270

Glu Asn Val Asn Val Val Ser Gly Asp Glu Val Tyr Ser Leu Ala Tyr
      275                280                285

Tyr Asn Gln Pro Glu Gln Glu Ser Val Ala Ala Glu Thr Leu Gly Thr
    290                295                300

His Met Glu Asp Lys Val Ser Leu Asp Ile Tyr Ser Arg Leu Arg Lys
305                310                315                320

Ala Asn Ile Thr Asp Val Asp Tyr Glu Asp Ala Met
              325                330
```

<210> 58
<211> 57
<212> PRT
<213> Homo sapiens

<400> 58
```
Met Thr Leu Ala Tyr Leu Leu Leu Phe Leu Cys Phe Val Ile Leu Ser
  1               5                10                15

Pro Lys Pro Thr Met Asp Pro Met Leu Glu Arg Ala Lys Thr Ser Phe
              20                25                30

Ser Ser Cys Pro Arg Ser Gln Val Met Leu Val Tyr His Leu Phe Leu
        35                40                45

Met Asp Phe Gln Cys Val Met Leu Cys
      50                55
```

<210> 59
<211> 100
<212> PRT
<213> Homo sapiens

<400> 59
```
Met Ser Pro Asn Leu Gly Leu Lys Trp Ile Ser Met Ile Leu Ile Thr
  1               5                10                15

Tyr Trp Ala Leu Asn Leu Ala Pro Val Val Ala Ser Ile Asn Leu Phe
              20                25                30

Thr Ser Thr Ile Val Leu Lys Glu Gly Glu Gly Asn Glu Asp Glu Ser
        35                40                45

Val Pro Gly Ala Asn Glu Arg Pro Gln Thr Thr Gly Ala Ser Phe Phe
    50                55                60

Phe Pro Gly Leu Lys Pro His Gly Val Leu Trp Glu Arg Ala Gly Thr
 65               70                75                80
```

42

Leu Gly Ala Arg Ser Thr Trp Val Pro Ser Ser Ala Gln Trp Met Thr
                85   90   95

Asp Ser Trp Val
            100

<210> 60
<211> 106
<212> PRT
<213> Homo sapiens

<400> 60
Met Val His Ile Ala Ile Lys Thr Pro Leu His Pro Ala Thr Pro Ile
  1   5   10   15

Pro His Arg Ala Phe Val Pro Ala Leu Ala Phe Leu Pro Phe Ser Phe
                20   25   30

Ser Ser Pro Leu Ser Ser Leu Lys Ala Val Ser Cys Phe Gln Cys Asp
                35   40   45

Asn Thr Met Met Ser Phe Gly Arg Ile Cys Gln Asp Arg Leu Ile Leu
      50   55   60

Ser Pro Gly Cys Arg Met Cys Met Arg Gln Cys Cys Gln Ala Ile Leu
 65   70   75   80

Phe Glu Ala Leu Cys Cys His Asn Tyr His Gln Val His Thr Val Gly
                85   90   95

Lys Arg Leu Thr Pro Asp Phe Arg Lys Cys
                100   105

<210> 61
<211> 90
<212> PRT
<213> Homo sapiens

<400> 61
Met Leu Val Leu Phe Cys Phe Ile Ser Leu Ile Lys Val Gln Cys Thr
  1   5   10   15

Leu Cys His Ser Ser Val Gly Asn Arg Ile Pro Leu Lys Ser Trp Pro
                20   25   30

Cys Lys Ile Gln Leu Ser Phe Asn Ile His Ala Phe Val Pro Leu Arg
                35   40   45

Lys Tyr Phe Leu Ser Phe Phe Val Leu Gln Asn Tyr Asn Val Ile Gln
      50   55   60

Gly Val Tyr Arg Leu Val Ile Lys Gly Ser Phe Leu Cys Val Thr Phe
 65   70   75   80

Phe Leu Tyr Ser Tyr Ser Ile Phe Lys Gln
                85   90

<210> 62
<211> 148
<212> PRT
<213> Homo sapiens

<400> 62
Met Ser Pro Gly Tyr Thr Phe Lys Thr Ala Leu Ala Val Leu Tyr Leu
  1   5   10   15

Val His Met Ile Gln Asn Met Phe Pro Tyr Asn Met Gly Leu Ser Leu
             20   25   30

Leu Ala Asn Pro Ala Pro Ser Ser Ser Ser Asn Leu Leu Ser Glu Ala
         35   40   45

Ser Ala Leu His Leu Leu Leu Ala Asp Gly Asn Leu Gln Gly Lys Ala
     50   55   60

Glu Gly Phe Leu Gly Lys Pro Gly Lys Pro Val Phe Pro Met Cys Gln
 65   70   75   80

Ile Cys Leu Ala Ser Lys Lys Gly Cys Met Gly Phe Leu Ala Ser Phe
                 85   90   95

Gln Glu Ala Leu Gly Phe Leu Leu Leu Pro Arg Phe Pro Gln Ser Ser
             100   105   110

Gln Met Leu Lys Phe Leu Lys Val Asp Val Thr Gly Ser Leu Thr Thr
         115   120   125

Asn Lys Leu Ala Val Thr Val Phe Glu Thr Gln Tyr Leu Trp Gln Leu
     130   135   140

Thr Ser Asn Gln
145

<210> 63
<211> 78
<212> PRT
<213> Homo sapiens

<400> 63
Met Met Ile Ala Leu Leu Ile Ser Lys Lys Trp Ser Met Leu Gly Leu
  1   5   10   15

Arg Pro Gly Ala Leu Tyr Leu Leu Cys Leu His Leu Phe Leu Gly Asp
             20   25   30

Leu Thr Gln Tyr His Ala Val Asn Lys Leu Met Thr Pro Lys Ser Ile
         35   40   45

Tyr Pro Ala Leu Val Pro Leu Trp Ala Pro Leu Asn Ile Ser Ser Pro

```
        50                      55                      60
Thr Phe Leu Leu Ser Met Lys Ser Thr Gln Met Pro Ser Cys
 65                  70                  75
```

```
<210> 64
<211> 41
<212> PRT
<213> Homo sapiens

<400> 64
Met Ala Ile Trp Lys Leu Ile Ser Ile Tyr Phe Met Phe Ala Thr Trp
 1               5                  10                  15

Leu Tyr Ser Ile Ser Pro Lys Leu Lys Asn Asn Leu Pro Gly Leu Gln
            20                  25                  30

Asp Pro Lys Glu Thr Cys Leu Met Glu
        35                  40
```

```
<210> 65
<211> 43
<212> PRT
<213> Homo sapiens

<400> 65
Met Glu His Leu Ile Arg Ser Gly Val Lys Ile Leu Phe Leu Asn Leu
 1               5                  10                  15

Leu Leu Thr Ser Cys Thr Thr Leu Asn Glu Trp Leu Asn Phe Leu Val
            20                  25                  30

Thr Leu Asn Cys Ser Arg Tyr Lys Met Thr Gly
        35                  40
```

```
<210> 66
<211> 49
<212> PRT
<213> Homo sapiens

<400> 66
Met Val Asn Leu Thr Val Pro Pro Leu Leu Leu Leu Tyr Val Leu Gly
 1               5                  10                  15

His Gly Lys Pro Lys Glu Cys Leu Arg Cys Ser Ser Gly Leu Ser Lys
            20                  25                  30

Ser Tyr Thr Asp Leu Gly Arg Arg Ser Ala Asp Ser Lys His Ser Leu
        35                  40                  45

Lys
```

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<210> 67
<211> 76
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (22)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 67
Met Asn Arg Gly Gln Arg Leu Cys Leu Ala Phe Val Ser Leu Phe Pro
 1               5                  10                  15

Pro Cys Asn Ser Leu Xaa Pro Pro Pro Thr Leu Phe Pro Ser Pro Leu
                20                  25                  30

Leu Pro Leu Ser Leu Thr Ser Pro Thr Pro His Ser Leu Ser Ser Leu
            35                  40                  45

Ala Val Ser Cys Val Cys Val Gly Val Cys Val Phe Gly Cys Val Asn
        50                  55                  60

Val Gly Ser Ser Thr Thr Gly Phe Cys Asn Leu Gly
 65                  70                  75


<210> 68
<211> 58
<212> PRT
<213> Homo sapiens

<400> 68
Met Pro Arg Asp Ala Ser Leu Ala Arg Arg Ala Cys Leu Ser Leu Leu
 1               5                  10                  15

Leu His Leu Ser Trp Phe Pro Pro Cys Ser Ala Pro Gly Val Ile Phe
                20                  25                  30

Ser His Ser Gly Tyr Gln Gly Phe Tyr His Ile Gly Phe Pro Lys Pro
            35                  40                  45

His Ser Asn Ser Pro Leu Ser Gly Lys Pro
        50                  55


<210> 69
<211> 44
<212> PRT
<213> Homo sapiens

<400> 69
Met Leu Cys Phe Ser Pro Leu Cys Arg Arg Leu Phe Phe Pro Leu Leu
 1               5                  10                  15

Phe Gln Cys Arg Trp Phe Leu Leu Asn Leu Thr Pro Phe Ser Cys Ala
                20                  25                  30
```

Gln Cys Gly Asn Lys Ser Ser Glu Arg Ile His Leu
        35   40

<210> 70
<211> 61
<212> PRT
<213> Homo sapiens

<400> 70
Met Gly Gly Leu Trp Asn Val Arg Phe Leu Leu Ile Pro Thr Val Leu
  1   5   10   15

Trp Gly Phe His Cys Ser Gln Glu Arg Ala Phe Pró Arg Lys Leu Gln
              20   25   30

Val Arg Ser Leu Gln Trp Pro Lys Gly Asp Pro Pro Glu Glu Val Thr
          35   40   45

Leu Pro Asn Trp Asp Ile Gly Thr Leu Asp Leu Asn Ile
      50   55   60

<210> 71
<211> 42
<212> PRT
<213> Homo sapiens

<400> 71
Met Met Leu Gly Leu Arg Gln Lys Leu Thr Thr Ser Leu Thr Ser Ala
  1   5   10   15

Ala Ala Leu Thr Cys Val Leu Leu Leu Ser Met Thr Gly Met Thr Thr
              20   25   30

Ser Ser Ser Arg Ser Val Leu Trp Lys Thr
          35   40

<210> 72
<211> 83
<212> PRT
<213> Homo sapiens

<400> 72
Met Glu Thr Ala Glu Leu Thr Ser Pro Gly Leu Phe Ala Gln Lys Arg
  1   5   10   15

Gly Leu Leu Leu Leu Ser Leu Cys Phe Phe Pro Trp Pro Leu Cys Val
              20   25   30

Leu Ser Ser Ser Pro Ala His Asp Gln Leu Pro Ser Ala Glu Gly Lys
          35   40   45

Leu Leu Lys Val Glu Ile Leu Ser Ser Pro Pro Leu Phe Ser Arg Lys
      50   55   60

Leu Ser Leu Glu Leu Cys Pro Val Arg His Arg Thr Leu Ala Arg Gly
65   70   75   80

Leu Asn Asp

<210> 73
<211> 55
<212> PRT
<213> Homo sapiens

<400> 73
Met Ala Val Ile His Tyr Gln Gln Phe Leu Trp Phe Leu Glu Leu Val
  1   5   10   15

Leu Gln Cys Ser Trp Gly Gln Thr Leu Ile Gly Cys Phe Phe Val Val
             20   25   30

Leu Arg Gly His Leu Cys Ser Ile Val Arg Thr Gly Lys Arg Met Phe
          35   40   45

Leu Glu His Cys Asp Leu Glu
      50   55

<210> 74
<211> 85
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (72)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 74
Met Leu His Leu Ile Tyr Tyr Phe Val Val Ile Ile Gln Leu Met Ile
  1   5   10   15

Ala Arg Ala Asp Ile Pro Gln Ile Ala Thr Val Phe Pro Gly Gln Cys
             20   25   30

Val Lys Ser Val Leu Leu Cys Ile Ile Leu Phe Asn Pro His Ser Tyr
          35   40   45

Leu Leu Cys Val Leu Ile Leu Trp Ile Glu Met Leu Arg Val Arg Lys
      50   55   60

Val Lys Pro Pro Phe Gln Ser Xaa Ile Ala Ser Tyr Leu Gln Arg Lys
 65   70   75   80

Phe Ser Thr Asp Leu
              85

<210> 75
<211> 94
<212> PRT
<213> Homo sapiens

<400> 75
Met His Phe Phe Val Glu Ser Thr Ile Val Ser Asp Thr Leu Ile Thr
 1   5   10   15

Leu Ser Asn Leu Thr Phe His Lys Cys Pro Glu Tyr Glu Asn Ile Ile
            20   25   30

Gln Asp Leu Asn Thr Asn Tyr Gln Asn Leu Gln Leu Ser Asn Gly Arg
        35   40   45

Leu Arg Phe Met Leu Cys His Val Phe Ser Ser Phe Leu Phe Val Met
    50   55   60

Val Phe Gln Ile Val Glu Lys Glu Asn Ile Leu Phe Val Ile Ala Ser
65   70   75   80

Ala Ser Tyr Phe Cys Lys Thr Asn Tyr Ser Asn Ser Val Val
                85   90

<210> 76
<211> 47
<212> PRT
<213> Homo sapiens

<400> 76
Met Thr Ala Gly Phe Met Gly Met Ala Val Ala Ile Ile Leu Phe Gly
 1   5   10   15

Trp Ile Ile Gly Val Leu Gly Cys Cys Trp Asp Arg Gly Leu Met Gln
            20   25   30

Tyr Val Ala Gly Cys Ser Ser Ser Trp Glu Gly Lys Gln Trp Asn
        35   40   45

<210> 77
<211> 120
<212> PRT
<213> Homo sapiens

<400> 77
Met Arg Pro Val Ser Val Trp Gln Trp Ser Pro Trp Gly Leu Leu Leu
 1   5   10   15

Cys Leu Leu Cys Ser Ser Cys Leu Gly Ser Pro Ser Pro Ser Thr Gly
            20   25   30

Pro Glu Lys Lys Ala Gly Ser Gln Gly Leu Arg Phe Arg Leu Ala Gly
        35   40   45

Phe Pro Arg Lys Pro Tyr Glu Gly Arg Val Glu Ile Gln Arg Ala Gly

50   55   60

Glu Trp Gly Thr Ile Cys Asp Asp Asp Phe Lys Leu Gln Ala Ala Gln
  65   70   75   80

Ile Leu Cys Arg Glu Leu Gly Phe Thr Glu Pro Gln Leu Asp Pro Gln
                    85   90   95

Cys Gln Ile Trp Pro Trp Asn Ser Arg Ile Trp Leu Asp Asn Leu Ser
              100   105   110

Cys Met Gly Pro Ser Arg Cys Asp
          115   120

<210> 78
<211> 305
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (4)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (6)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 78
Met Pro Ala Xaa Ala Xaa Ala Ser Phe Pro Phe Phe Leu Phe Ala Leu
  1   5   10   15

Phe Val Ile Ala Cys Gly Leu Gly Cys Leu Glu Thr Ala Ala Asn Pro
                20   25   30

Tyr Ala Thr Val Leu Gly Glu Pro Gln Gly Ala Glu Arg Arg Leu Asn
          35   40   45

Leu Ala Gln Ser Phe Asn Gly Leu Gly Gln Phe Phe Gly Pro Leu Ile
      50   55   60

Gly Gly Ala Met Phe Phe Ser Ala Gly Ser Thr Pro Ala Ser Asp Met
  65   70   75   80

Ser Ser Leu Gln Thr Thr Tyr Val Val Ile Ala Val Leu Val Leu Leu
                85   90   95

Val Ala Leu Leu Ile Ala Arg Thr Pro Leu Pro Asp Leu Arg Ala Gln
              100   105   110

Glu Gln Ala Leu Gln Pro Thr Ala Gly Lys Gly Leu Trp Gln His Arg
              115   120   125

Glu Phe Val Gly Gly Val Ile Thr Gln Phe Phe Tyr Val Ala Ala Gln
      130   135   140

```
Val Gly Val Gly Ala Phe Phe Ile Asn Tyr Val Thr Glu His Trp Ala
145             150             155             160

Gln Met Gly Asn Gln Gln Ala Ala Tyr Leu Leu Ser Ile Ala Met Leu
                165             170             175

Ala Phe Met Phe Gly Arg Phe Phe Ser Thr Trp Leu Met Gly Arg Val
            180             185             190

Ser Ala Gln Lys Leu Leu Leu Ile Tyr Ala Leu Ile Asn Ile Ala Leu
        195             200             205

Cys Gly Leu Val Val Ile Gly Leu Glu Gly Ile Ser Val Ile Ala Leu
    210             215             220

Ile Ala Val Phe Phe Phe Met Ser Ile Met Phe Pro Thr Leu Phe Ala
225             230             235             240

Met Gly Val Lys Asn Leu Gly Pro His Thr Lys Arg Gly Ser Ser Phe
            245             250             255

Met Ile Met Ala Ile Val Gly Gly Ala Leu Met Pro Tyr Leu Met Gly
            260             265             270

Lys Val Ala Asp Asn Ser Thr Val Ala Leu Ala Tyr Leu Leu Pro Met
        275             280             285

Gly Cys Phe Val Ile Val Ala Val Tyr Ala Arg Ser Arg Leu Arg His
    290             295             300

Pro
305


<210> 79
<211> 184
<212> PRT
<213> Homo sapiens

<400> 79
Gln Phe His Thr Gly Thr Ala Met Thr Met Ile Thr Pro Ser Ser Asn
 1               5               10              15

Thr Thr His Tyr Arg Glu Ser Trp Tyr Ala Cys Arg Tyr Arg Ser Gly
                20              25              30

Ile Pro Gly Ser Thr His Ala Ser Ala Gly Lys Gln Leu Thr Ser Ala
            35              40              45

Val Leu Arg Ala Ser Arg Pro Pro Leu Pro Ser Leu Pro Ala Arg Met
        50              55              60

Ala Ser Cys Leu Ala Leu Arg Met Ala Leu Leu Leu Val Ser Gly Val
 65             70              75              80

Leu Ala Pro Ala Val Leu Thr Asp Asp Val Pro Gln Glu Pro Val Pro
```

```
                    85                      90                      95

Thr Leu Trp Asn Glu Pro Ala Glu Leu Pro Ser Gly Glu Gly Pro Val
            100                 105                 110

Glu Ser Thr Ser Pro Gly Arg Glu Pro Val Asp Thr Gly Pro Pro Ala
            115                 120                 125

Pro Thr Val Ala Pro Gly Pro Glu Asp Ser Thr Ala Gln Glu Arg Leu
        130                 135                 140

Asp Gln Gly Gly Gly Ser Leu Gly Pro Gly Ala Ile Ala Ala Ile Val
145                 150                 155                 160

Ile Ala Ala Leu Leu Ala Thr Cys Val Val Leu Ala Leu Val Val Val
            165                 170                 175

Ala Leu Arg Lys Phe Ser Ala Ser
            180
```

```
<210> 80
<211> 46
<212> PRT
<213> Homo sapiens

<400> 80
Cys Glu Glu Gln Asp Gly Arg Leu Ala Thr Tyr Ser Gln Leu Tyr Gln
 1               5                  10                  15

Ala Trp Thr Glu Gly Leu Asp Trp Cys Asn Ala Gly Trp Leu Leu Glu
            20                  25                  30

Gly Ser Val Arg Tyr Pro Val Leu Thr Ala Arg Ala Pro Cys
        35                  40                  45
```

```
<210> 81
<211> 47
<212> PRT
<213> Homo sapiens

<400> 81
Cys Arg Arg Arg Gly Ala Val Val Ala Lys Val Gly His Leu Tyr Ala
 1               5                  10                  15

Ala Trp Lys Phe Ser Gly Leu Asp Gln Cys Asp Gly Gly Trp Leu Ala
            20                  25                  30

Asp Gly Ser Val Arg Phe Pro Ile Thr Thr Pro Arg Pro Arg Cys
        35                  40                  45
```

```
<210> 82
<211> 47
<212> PRT
<213> Homo sapiens
```

<400> 82
Met Thr Ala Gly Phe Met Gly Met Ala Val Ala Ile Ile Leu Phe Gly
 1   5   10   15

Trp Ile Ile Gly Val Leu Gly Cys Cys Trp Asp Arg Gly Leu Met Gln
            20   25   30

Tyr Val Ala Gly Cys Ser Ser Ser Trp Glu Gly Lys Gln Trp Asn   •
        35   40   45

<210> 83
<211> 120
<212> PRT
<213> Homo sapiens

<400> 83
Met Arg Pro Val Ser Val Trp Gln Trp Ser Pro Trp Gly Leu Leu Leu
 1   5   10   15

Cys Leu Leu Cys Ser Ser Cys Leu Gly Ser Pro Ser Pro Ser Thr Gly
            20   25   30

Pro Glu Lys Lys Ala Gly Ser Gln Gly Leu Arg Phe Arg Leu Ala Gly
        35   40   45

Phe Pro Arg Lys Pro Tyr Glu Gly Arg Val Glu Ile Gln Arg Ala Gly
    50   55   60

Glu Trp Gly Thr Ile Cys Asp Asp Asp Phe Lys Leu Gln Ala Ala Gln
 65   70   75   80

Ile Leu Cys Arg Glu Leu Gly Phe Thr Glu Pro Gln Leu Asp Pro Gln
            85   90   95

Cys Gln Ile Trp Pro Trp Asn Ser Arg Ile Trp Leu Asp Asn Leu Ser
        100   105   110

Cys Met Gly Pro Ser Arg Cys Asp
        115   120

<210> 84
<211> 38
<212> PRT
<213> Homo sapiens

<400> 84
Gly Ala His Pro Gly Glu Gly Arg Val Glu Val Leu Lys Ala Ser Thr
 1   5   10   15

Trp Gly Thr Val Cys Asp Arg Lys Trp Asp Leu His Ala Ala Ser Val
            20   25   30

Val Cys Arg Glu Leu Gly
        35

```
<210> 85
<211> 323
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (28)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (30)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (116)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (158)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 85
Met Asp Arg His Gly Leu Gln Gly Arg Asp Pro Ala Gly Pro Val Pro
 1               5                   10-                  15

Val Cys Gly Gly Arg Ala Ala Val His Ala Gly Xaa Gly Xaa Gly Glu
               20                  25                  30

Leu Ser Val Phe Pro Val Arg Ala Val Cys His Arg Leu Arg Pro Gly
           35                  40                  45

Leu Pro Gly Asp Arg Cys Gln Pro Leu Cys His Gly Ala Gly Gly Thr
      50                  55                  60

Pro Gly Arg Arg Ala Ala Val Glu Pro Gly Ala Ile Ile Gln Trp Pro
 65                  70                  75                  80

Trp Pro Val Leu Arg Pro Ala Asp Trp Arg Arg Asp Val Leu Gln Arg
               85                  90                  95

Arg Gln His Thr Gly Leu Gly His Glu Phe Val Ala Asp His Leu Arg
              100                 105                 110

Gly Asp Arg Xaa Ser Gly Thr Ala Gly Gly Ala Ala Asp Arg Pro His
          115                 120                 125

Ala Ala Ala Gly Phe Ala Arg Pro Gly Thr Gly Thr Ala Thr Asp Gly
      130                 135                 140

Arg Gln Arg Ser Val Ala Ala Pro Gly Val Cys Arg Trp Xaa Asp His
145                 150                 155                 160
```

Ala Val Phe Leu Cys Gly Gly Pro Gly Arg Ser Arg Arg Ile Phe His
          165   170   175

Gln Leu Arg His Arg Ala Leu Gly Thr Asp Gly Gln Ser Ala Ser Arg
          180   .   185   190

Leu Ser Ala Val Asp Arg Asn Ala Gly Leu His Val Arg Ala Leu Phe
        195   200   .   205

Gln Tyr Leu Ala Asp Gly Pro Gly Gln Arg Ala Glu Ala Ala Ala Asp
  210   215   220

Leu Cys Ala Asp Gln Tyr Arg Val Val Arg Pro Gly Gly Asp Arg Pro
225   230   235   240

Gly Arg Tyr Leu Ser Asp Arg Ala Asp Arg Ser Val Leu Leu His Val
          245   250   255

Asp His Val Pro Asp Ala Val Arg His Gly Arg Glu Glu Pro Arg Ala
          260   265   270

Ala His Gln Ala Arg Gln Phe Val His Asp His Gly Asp Arg Arg Arg
          275   280   285

Arg Pro Asp Ala Leu Leu Asp Gly Gln Gly Gly Gln Gln His Gly
    290   295   300

Gly Ala Gly Leu Pro Val Ala Tyr Gly Val Phe Arg Asp Cys Gly Gly
305   310   315   320

Val Cys Pro

<210> 86
<211> 35
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (28)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (30)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 86
Met Asp Arg His Gly Leu Gln Gly Arg Asp Pro Ala Gly Pro Val Pro
  1   5   10   15

Val Cys Gly Gly Arg Ala Ala Val His Ala Gly Xaa Gly Xaa Gly Glu
        20   25   30

Leu Ser Val
        35

<210> 87
<211> 36
<212> PRT
<213> Homo sapiens

<400> 87
Phe Pro Val Arg Ala Val Cys His Arg Leu Arg Pro Gly Leu Pro Gly
  1   5   10   15

Asp Arg Cys Gln Pro Leu Cys His Gly Ala Gly Gly Thr Pro Gly Arg
            20   25   30

Arg Ala Ala Val
        35

<210> 88
<211> 41
<212> PRT
<213> Homo sapiens

<400> 88
Glu Pro Gly Ala Ile Ile Gln Trp Pro Trp Pro Val Leu Arg Pro Ala
  1   5   10   15

Asp Trp Arg Arg Asp Val Leu Gln Arg Arg Gln His Thr Gly Leu Gly
            20   25   30

His Glu Phe Val Ala Asp His Leu Arg
        35   40

<210> 89
<211> 35
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (4)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 89
Gly Asp Arg Xaa Ser Gly Thr Ala Gly Gly Ala Ala Asp Arg Pro His
  1   5   10   15

Ala Ala Ala Gly Phe Ala Arg Pro Gly Thr Gly Thr Ala Thr Asp Gly
            20   25   30

Arg Gln Arg
        35

<210> 90
<211> 35
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (11)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 90
Ser Val Ala Ala Pro Gly Val Cys Arg Trp Xaa Asp His Ala Val Phe
 1   5   10   15

Leu Cys Gly Gly Pro Gly Arg Ser Arg Arg Ile Phe His Gln Leu Arg
            20   25   30

His Arg Ala
         35

<210> 91
<211> 36
<212> PRT
<213> Homo sapiens

<400> 91
Leu Gly Thr Asp Gly Gln Ser Ala Ser Arg Leu Ser Ala Val Asp Arg
 1   5   10   15

Asn Ala Gly Leu His Val Arg Ala Leu Phe Gln Tyr Leu Ala Asp Gly
            20   25   30

Pro Gly Gln Arg
         35

<210> 92
<211> 34
<212> PRT
<213> Homo sapiens

<400> 92
Ala Glu Ala Ala Ala Asp Leu Cys Ala Asp Gln Tyr Arg Val Val Arg
 1   5   10   15

Pro Gly Gly Asp Arg Pro Gly Arg Tyr Leu Ser Asp Arg Ala Asp Arg
            20   25   30

Ser Val

<210> 93
<211> 37
<212> PRT
<213> Homo sapiens

<400> 93
Leu Leu His Val Asp His Val Pro Asp Ala Val Arg His Gly Arg Glu
 1   5   10   15

Glu Pro Arg Ala Ala His Gln Ala Arg Gln Phe Val His Asp His Gly
            20   25   30

Asp Arg Arg Arg Arg
        35

<210> 94
<211> 34
<212> PRT
<213> Homo sapiens

<400> 94
Pro Asp Ala Leu Leu Asp Gly Gln Gly Gly Gln Gln His Gly Gly
 1   5   10   15

Ala Gly Leu Pro Val Ala Tyr Gly Val Phe Arg Asp Cys Gly Gly Val
            20   25   30

Cys Pro

<210> 95
<211> 305
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (4)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (6)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 95
Met Pro Ala Xaa Ala Xaa Ala Ser Phe Pro Phe Phe Leu Phe Ala Leu
 1   5   10   15

Phe Val Ile Ala Cys Gly Leu Gly Cys Leu Glu Thr Ala Ala Asn Pro
            20   25   30

Tyr Ala Thr Val Leu Gly Glu Pro Gln Gly Ala Glu Arg Arg Leu Asn
        35   40   45

Leu Ala Gln Ser Phe Asn Gly Leu Gly Gln Phe Phe Gly Pro Leu Ile
    50   55   60

Gly Gly Ala Met Phe Phe Ser Ala Gly Ser Thr Pro Ala Ser Asp Met

```
    65                    70                    75                    80

Ser Ser Leu Gln Thr Thr Tyr Val Val Ile Ala Val Leu Val Leu Leu
                85                    90                    95

Val Ala Leu Leu Ile Ala Arg Thr Pro Leu Pro Asp Leu Arg Ala Gln
            100                   105                   110

Glu Gln Ala Leu Gln Pro Thr Ala Gly Lys Gly Leu Trp Gln His Arg
            115                   120                   125

Glu Phe Val Gly Gly Val Ile Thr Gln Phe Phe Tyr Val Ala Ala Gln
    130                   135                   140

Val Gly Val Gly Ala Phe Phe Ile Asn Tyr Val Thr Glu His Trp Ala
145                   150                   155                   160

Gln Met Gly Asn Gln Gln Ala Ala Tyr Leu Leu Ser Ile Ala Met Leu
                165                   170                   175

Ala Phe Met Phe Gly Arg Phe Phe Ser Thr Trp Leu Met Gly Arg Val
                180                   185                   190

Ser Ala Gln Lys Leu Leu Leu Ile Tyr Ala Leu Ile Asn Ile Ala Leu
            195                   200                   205

Cys Gly Leu Val Val Ile Gly Leu Glu Gly Ile Ser Val Ile Ala Leu
    210                   215                   220

Ile Ala Val Phe Phe Phe Met Ser Ile Met Phe Pro Thr Leu Phe Ala
225                   230                   235                   240

Met Gly Val Lys Asn Leu Gly Pro His Thr Lys Arg Gly Ser Ser Phe
                245                   250                   255

Met Ile Met Ala Ile Val Gly Gly Ala Leu Met Pro Tyr Leu Met Gly
                260                   265                   270

Lys Val Ala Asp Asn Ser Thr Val Ala Leu Ala Tyr Leu Leu Pro Met
            275                   280                   285

Gly Cys Phe Val Ile Val Ala Val Tyr Ala Arg Ser Arg Leu Arg His
    290                   295                   300

Pro
305


<210> 96
<211> 88
<212> PRT
<213> Homo sapiens

<400> 96
Gly Thr Ser Glu Gly Leu Gln Lys Asp Pro Ser His Asp Leu Phe Ala
    1                 5                    10                    15
```

Leu Ala Ser Leu Pro Asn Pro Arg Trp Leu Thr Arg Gln Ser Gln Met
            20   25   30

Leu Thr Ser His Gln Pro Thr Ser Leu Ile His Ile Leu Leu Val Ser
            35   40   45

Leu Phe Leu Ser Asn Pro Leu Cys Phe Gly Leu Leu Ser Val Cys Pro
        50   55   60

Leu Gln Asn Ser Tyr Val Glu Ala Leu Thr Pro Asn Met Thr Leu Phe
65   70   75   80

Gly Asp Glu Ala Leu Ile Ile Ile
                85

<210> 97
<211> 120
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (66)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 97
Lys Asn Trp Asp Phe Pro Pro Pro Arg Pro Thr Gln Ile Asn Tyr Ile
 1   5   10   15

Tyr Thr Val Ser Ser Ser Ser Leu Thr Arg Ser Phe Trp Ala Leu His
            20   25   30

Phe Leu Leu Val Cys Val Gln Lys Leu Gln Val Asp Met Asn Arg Gly
        35   40   45

Gln Arg Leu Cys Leu Ala Phe Val Ser Leu Phe Pro Pro Cys Asn Ser
    50   55   60

Leu Xaa Pro Pro Pro Thr Leu Phe Pro Ser Pro Leu Leu Pro Leu Ser
65   70   75   80

Leu Thr Ser Pro Thr Pro His Ser Leu Ser Ser Leu Ala Val Ser Cys
            85   90   95

Val Cys Val Gly Val Cys Val Phe Gly Cys Val Asn Val Gly Ser Ser
            100   105   110

Thr Thr Gly Phe Cys Asn Leu Gly
        115   120

<210> 98
<211> 370
<212> PRT
<213> Homo sapiens

60

<400> 98
Met Pro Phe Thr Asn Pro Ala Arg Lys Asp Gly Ala Met Phe Phe His
 1   5   10   15

Trp Arg Arg Ala Ala Glu Glu Gly Lys Asp Tyr Pro Ser Ala Arg Phe
            20   25   30

Asn Lys Thr Val Gln Val Pro Val Tyr Ser Glu Gln Glu Tyr Gln Leu
        35   40   45

Tyr Leu His Asp Asp Ala Trp Thr Lys Ala Glu Thr Asp His Leu Phe
    50   55   60

Asp Leu Ser Arg Arg Phe Asp Leu Arg Phe Val Val Ile His Asp Arg
65   70   75   80

Tyr Asp His Gln Gln Phe Lys Lys Arg Ser Val Glu Asp Leu Lys Glu
            85   90   95

Arg Tyr Tyr His Ile Cys Ala Lys Leu Ala Asn Val Arg Ala Val Pro
            100   105   110

Gly Thr Asp Leu Lys Ile Pro Val Phe Asp Ala Gly His Glu Arg Arg
        115   120   125

Arg Lys Glu Gln Leu Glu Arg Leu Tyr Asn Arg Thr Pro Glu Gln Val
    130   135   140

Ala Glu Glu Glu Tyr Leu Leu Gln Glu Leu Arg Lys Ile Glu Ala Arg
145   150   155   160

Lys Lys Glu Arg Glu Lys Arg Ser Gln Asp Leu Gln Lys Leu Ile Thr
            165   170   175

Ala Ala Asp Thr Thr Ala Glu Gln Arg Arg Thr Glu Arg Lys Ala Pro
            180   185   190

Lys Lys Lys Leu Pro Gln Lys Lys Glu Ala Glu Lys Pro Ala Val Pro
        195   200   205

Glu Thr Ala Gly Ile Lys Phe Pro Asp Phe Lys Ser Ala Gly Val Thr
    210   215   220

Leu Arg Ser Gln Arg Met Lys Leu Pro Ser Ser Val Gly Gln Lys Lys
225   230   235   240

Ile Lys Ala Leu Glu Gln Met Leu Leu Glu Leu Gly Val Glu Leu Ser
            245   250   255

Pro Thr Pro Thr Glu Glu Leu Val His Met Phe Asn Glu Leu Arg Ser
        260   265   270

Asp Leu Val Leu Leu Tyr Glu Leu Lys Gln Ala Cys Ala Asn Cys Glu
        275   280   285

Tyr Glu Leu Gln Met Leu Arg His Arg His Glu Ala Leu Ala Arg Ala
    290   295   300

Gly Val Leu Gly Gly Pro Ala Thr Pro Ala Ser Gly Pro Gly Pro Ala
305   310   315   320

Ser Ala Glu Pro Ala Val Thr Glu Pro Gly Leu Gly Pro Asp Pro Lys
                325   330   335

Asp Thr Ile Ile Asp Val Val Gly Ala Pro Leu Thr Pro Asn Ser Arg
                340   345   350

Lys Arg Arg Glu Ser Ala Ser Ser Ser Ser Val Lys Lys Ala Lys
        355   360   365

Lys Pro
    370

<210> 99
<211> 39
<212> PRT
<213> Homo sapiens

<400> 99
Met Pro Phe Thr Asn Pro Ala Arg Lys Asp Gly Ala Met Phe Phe His
    1   5   10   15

Trp Arg Arg Ala Ala Glu Glu Gly Lys Asp Tyr Pro Ser Ala Arg Phe
            20   25   30

Asn Lys Thr Val Gln Val Pro
        35

<210> 100
<211> 41
<212> PRT
<213> Homo sapiens

<400> 100
Val Tyr Ser Glu Gln Glu Tyr Gln Leu Tyr Leu His Asp Asp Ala Trp
    1   5   10   15

Thr Lys Ala Glu Thr Asp His Leu Phe Asp Leu Ser Arg Arg Phe Asp
            20   25   30

Leu Arg Phe Val Val Ile His Asp Arg
        35   40

<210> 101
<211> 42
<212> PRT
<213> Homo sapiens

<400> 101
Tyr Asp His Gln Gln Phe Lys Lys Arg Ser Val Glu Asp Leu Lys Glu
    1   5   10   15

Arg Tyr Tyr His Ile Cys Ala Lys Leu Ala Asn Val Arg Ala Val Pro
          20   25   30

Gly Thr Asp Leu Lys Ile Pro Val Phe Asp
         35   40

<210> 102
<211> 43
<212> PRT
<213> Homo sapiens

<400> 102
Ala Gly His Glu Arg Arg Arg Lys Glu Gln Leu Glu Arg Leu Tyr Asn
  1   5   10   15

Arg Thr Pro Glu Gln Val Ala Glu Glu Glu Tyr Leu Leu Gln Glu Leu
          20   25   30

Arg Lys Ile Glu Ala Arg Lys Lys Glu Arg Glu
         35   40

<210> 103
<211> 41
<212> PRT
<213> Homo sapiens

<400> 103
Lys Arg Ser Gln Asp Leu Gln Lys Leu Ile Thr Ala Ala Asp Thr Thr
  1   5   10   15

Ala Glu Gln Arg Arg Thr Glu Arg Lys Ala Pro Lys Lys Lys Leu Pro
          20   25   30

Gln Lys Lys Glu Ala Glu Lys Pro Ala
         35   40

<210> 104
<211> 42
<212> PRT
<213> Homo sapiens

<400> 104
Val Pro Glu Thr Ala Gly Ile Lys Phe Pro Asp Phe Lys Ser Ala Gly
  1   5   10   15

Val Thr Leu Arg Ser Gln Arg Met Lys Leu Pro Ser Ser Val Gly Gln
          20   25   30

Lys Lys Ile Lys Ala Leu Glu Gln Met Leu
         35   40

<210> 105

<211> 43
<212> PRT
<213> Homo sapiens

<400> 105
Leu Glu Leu Gly Val Glu Leu Ser Pro Thr Pro Thr Glu Glu Leu Val
 1   5   10   15

His Met Phe Asn Glu Leu Arg Ser Asp Leu Val Leu Leu Tyr Glu Leu
            20   25   30

Lys Gln Ala Cys Ala Asn Cys Glu Tyr Glu Leu
         35   40

<210> 106
<211> 40
<212> PRT
<213> Homo sapiens

<400> 106
Gln Met Leu Arg His Arg His Glu Ala Leu Ala Arg Ala Gly Val Leu
 1   5   10   15

Gly Gly Pro Ala Thr Pro Ala Ser Gly Pro Gly Pro Ala Ser Ala Glu
            20   25   30

Pro Ala Val Thr Glu Pro Gly Leu
         35   40

<210> 107
<211> 39
<212> PRT
<213> Homo sapiens

<400> 107
Gly Pro Asp Pro Lys Asp Thr Ile Ile Asp Val Val Gly Ala Pro Leu
 1   5   10   15

Thr Pro Asn Ser Arg Lys Arg Arg Glu Ser Ala Ser Ser Ser Ser Ser
            20   25   30

Val Lys Lys Ala Lys Lys Pro
         35

<210> 108
<211> 112
<212> PRT
<213> Homo sapiens

<400> 108
Ala Pro Arg Ser Ala Thr Arg Ile Val Leu Met Lys Ala Leu Leu Gly
 1   5   10   15

Leu Phe Asp Arg Ala Gln His Pro Met Ser Pro His Leu Met Glu Thr

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              20                    25                    30

Ala Glu Leu Thr Ser Pro Gly Leu Phe Ala Gln Lys Arg Gly Leu Leu
        35                  40                  45

Leu Leu Ser Leu Cys Phe Phe Pro Trp Pro Leu Cys Val Leu Ser Ser
    50                  55                  60

Ser Pro Ala His Asp Gln Leu Pro Ser Ala Glu Gly Lys Leu Leu Lys
65                  70                  75                  80

Val Glu Ile Leu Ser Ser Pro Pro Leu Phe Ser Arg Lys Leu Ser Leu
                85                  90                  95

Glu Leu Cys Pro Val Arg His Arg Thr Leu Ala Arg Gly Leu Asn Asp
            100                 105                 110
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<210> 109
<211> 235
<212> PRT
<213> Homo sapiens

<400> 109
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Met Phe Phe Cys Cys Phe Ala Gly Thr Phe Met Phe Tyr Cys Ala His
  1               5                  10                  15

Trp Gln Thr Tyr Val Ser Gly Thr Leu Arg Phe Gly Ile Ile Asp Val
            20                  25                  30

Thr Glu Val Gln Ile Phe Ile Ile Ile Met His Leu Leu Ala Val Ile
        35                  40                  45

Gly Gly Pro Pro Phe Trp Gln Ser Met Ile Pro Val Leu Asn Ile Gln
    50                  55                  60

Met Lys Ile Phe Pro Ala Leu Cys Thr Val Ala Gly Thr Ile Phe Ser
65                  70                  75                  80

Cys Thr Asn Tyr Phe Arg Val Ile Phe Thr Gly Gly Val Gly Lys Asn
                85                  90                  95

Gly Ser Thr Ile Ala Gly Thr Ser Val Leu Ser Pro Phe Leu His Ile
            100                 105                 110

Gly Ser Val Ile Thr Leu Ala Ala Met Ile Tyr Lys Lys Ser Ala Val
        115                 120                 125

Gln Leu Phe Glu Lys His Pro Cys Leu Tyr Ile Leu Thr Phe Gly Phe
    130                 135                 140

Val Ser Ala Lys Ile Thr Asn Lys Leu Val Val Ala His Met Thr Lys
145                 150                 155                 160
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Ser Glu Met His Leu His Asp Thr Ala Phe Ile Gly Pro Ala Leu Leu
                165   170   175

Phe Leu Asp Gln Tyr Phe Asn Ser Phe Ile Asp Glu Tyr Ile Val Leu
            180   185   190

Trp Ile Ala Leu Val Phe Ser Phe Phe Asp Leu Ile Arg Tyr Cys Val
        195   200   205

Ser Val Cys Asn Gln Ile Ala Ser His Leu His Ile His Val Phe Arg
    210   215   220

Ile Lys Val Ser Thr Ala His Ser Asn His His
225   230   235

<210> 110
<211> 36
<212> PRT
<213> Homo sapiens

<400> 110
Met Phe Phe Cys Cys Phe Ala Gly Thr Phe Met Phe Tyr Cys Ala His
    1   5   10   15

Trp Gln Thr Tyr Val Ser Gly Thr Leu Arg Phe Gly Ile Ile Asp Val
            20   25   30

Thr Glu Val Gln
        35

<210> 111
<211> 38
<212> PRT
<213> Homo sapiens

<400> 111
Ile Phe Ile Ile Ile Met His Leu Leu Ala Val Ile Gly Gly Pro Pro
    1   5   10   15

Phe Trp Gln Ser Met Ile Pro Val Leu Asn Ile Gln Met Lys Ile Phe
            20   25   30

Pro Ala Leu Cys Thr Val
        35

<210> 112
<211> 38
<212> PRT
<213> Homo sapiens

<400> 112
Ala Gly Thr Ile Phe Ser Cys Thr Asn Tyr Phe Arg Val Ile Phe Thr
    1   5   10   15

Gly Gly Val Gly Lys Asn Gly Ser Thr Ile Ala Gly Thr Ser Val Leu
            20   25   30

Ser Pro Phe Leu His Ile
        35

<210> 113
<211> 38
<212> PRT
<213> Homo sapiens

<400> 113
Gly Ser Val Ile Thr Leu Ala Ala Met Ile Tyr Lys Lys Ser Ala Val
  1   5   10   15

Gln Leu Phe Glu Lys His Pro Cys Leu Tyr Ile Leu Thr Phe Gly Phe
            20   25   30

Val Ser Ala Lys Ile Thr
        35   -

<210> 114
<211> 37
<212> PRT
<213> Homo sapiens

<400> 114
Asn Lys Leu Val Val Ala His Met Thr Lys Ser Glu Met His Leu His
  1   5   10   15

Asp Thr Ala Phe Ile Gly Pro Ala Leu Leu Phe Leu Asp Gln Tyr Phe
            20   25   30

Asn Ser Phe Ile Asp
        35

<210> 115
<211> 48
<212> PRT
<213> Homo sapiens

<400> 115
Glu Tyr Ile Val Leu Trp Ile Ala Leu Val Phe Ser Phe Phe Asp Leu
  1   5   10   15

Ile Arg Tyr Cys Val Ser Val Cys Asn Gln Ile Ala Ser His Leu His
            20   25   30

Ile His Val Phe Arg Ile Lys Val Ser Thr Ala His Ser Asn His His
        35   40   45